



THE OFFICIAL ORGAN OF THE B.B.C.

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EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES OF THE BRITISH BROADCASTING COMPANY.

For the Week Commencing
SUNDAY, MARCH 23rd.

LONDON	CARDIFF
ABERDEEN	GLASGOW
BIRMINGHAM	MANCHESTER
BOURNEMOUTH	NEWCASTLE
SHEFFIELD (Relay)	
PLYMOUTH (Relay)	

SPECIAL CONTENTS:

STORIES AND STORY TELLING.
A Talk by Stacy Aumonier.

THE MYSTERY OF THE MICROPHONE.
By P. P. Eckersley.

RADIO PIONEERS OF LONG AGO.

OFFICIAL NEWS AND VIEWS.

REVIVAL OF THE HARPSICHORD.

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part of the world): SIX MONTHS, 6s. 9d.;
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In Reply to John o' London.

By J. C. W. Reith, Managing Director of the B.B.C.

The following is a reply to the article by Mr. Wilfred Whitten (John o' London), entitled "The Lure and Fear of Broadcasting," reprinted in last week's "Radio Times" from "John o' London's Weekly."

I AM vexed with my secretary. By her remissness I have lost an opportunity. I am on the look-out for opportunities at all times myself, but I keep a secretary to help me to find them. If she had not "slipped up," as the Americans say, I should have met "John o' London." She has an instruction to notify me of the projected visits of celebrities to 2, Savoy Hill. It does not imply that I turn out to greet them, but I just like to know about it. Perhaps the office-boy gets a message to be handy to take the personage's hat, or the liftman to be ready to lift. Perhaps even I ask the Controller, or Director of Programmes, to be there to control or direct. But my organisation has failed. "John o' London" has come and gone, and I was not of it. As I said, I am vexed.

I was first made conscious of my loss when I read his letter to Gog and Magog, and felt a little hurt by some of his remarks. In the first place, his description of the colour scheme is enough to frighten off the artistic and the temperamental. When he comes again, as I hope he will (giving due notice), I shall show him that the carpet is blue, not green. Then again the artificial sunlight comes in through the artificial windows and not from the roof; it took a great deal of thought to get this right. I think that wait in the corridor till the red light went out must have upset him. The corridor is draughty. Had I been on the spot I should have piloted him gently but determinedly up to the reception-room, where he would have had more comfort and retained a happier outlook on life and broadcasting.

Incidentally, I must have a look at those commissionaires again. They had not struck me as being ghostly. I am afraid they will

become supercilious if they happen on "John o' London's" letter. Anyhow, I shall hesitate before sending one for a taxi again. But what if I tell our accountant people to try the effect of a shadow pay-envelope on them?

As I read on in his letter I began to be disappointed. He indicated that some of his broadcasting friends are less enthusiastic than they were. Novelty soon wears thin, yes. What more natural? I am sure when he comes again to Savoy Hill he will notice that somebody has just dropped a cigarette end outside the studio door, and that the announcer took an appalling liberty with the King's English. The novelty and the excitement will have in a measure passed. But I could still show him many new and interesting things that did not come within his purview before. When the romantic glamour of getting anything by wireless has passed, one grows more stolid, rather blasé, and one is always expecting something new and better. The chiming and the tolling of Big Ben heard echoing through all the wireless homes of the land was wonderful for a week, but now if we hope to thrill by a time-signal we must get the Time-gun on Battery Point, New York.

It is always interesting to meet a man who has never listened to broadcasting. I do not often have the chance. I hear my Company, my colleagues, myself, and all our operations discussed with engaging, if occasionally embarrassing candour, in the railway train, restaurants, everywhere. Only last week I vacated a favourite corner in a club because my neighbours were discussing broadcasting in general terms, and I wanted an off period after dinner. I found myself eavesdropping uneasily beside a group criticising my last article in *The Radio Times*.

I want to suggest to "John o' London" that there is a certain diffidence abroad. Broadcasting has found its way into every class of

(Continued overleaf in column 2.)

A Burns' Problem Song.

The Story of "O Wat Ye Wha's in Yon Town?" By A. B. Cooper.

ANOTHER Burns puzzle has been sprung upon the world. The story starts with John Syme, a personality we have met before in these song-stories, for he it was who was riding by the side of Burns, between Gatehouse and Kilmorie, in a storm of wind and rain, on the occasion when the poet composed "Scots Wha Hae."

When Burns went to Dumfries to be an exciseman, he lived over the office of Mr. Syme, who had been appointed distributor of stamps there, in 1791—a much superior position to that which Burns held, although they were much of the same age. But Mr. Syme was a lawyer and "Robbie" Burns was only a poet! But Syme was a good fellow, fond of entertaining on a somewhat lavish scale, and Burns was always an honoured guest on great occasions, whilst the two men in private were great cronies.

Syme remained the poet's good friend to the last, was one of the executors of his will, and spent some time at Liverpool helping Currie with his famous edition of Burns's works.

A Cryptic Letter.

Now, as the two men lived in the same town, few letters passed between them, but one of these has just now taken a new lease of interest for all Burns lovers. Here it is:—

"You know that among other high dignities, you have the honour to be my supreme court of critical judicature, from which there is no appeal. I enclose you a song which I composed since I saw you, and I am going to give you the history of it. Do you know that among much that I admire among the characters and manners of those great folk whom I have now the honour to call my acquaintances, the O—— family, there is nothing charms me more than Mr. O's unaccountable attachment to that incomparable woman."

A Poet's Despair.

"Did you ever, my dear Syme, meet with a man who owed more to the Divine Oliver of all good things than Mr. O? A fine fortune; a pleasing exterior; self-evident amiable dispositions, and an ingenious upright mind, and that informed too, much beyond the usual run of young fellows of his rank and fortune; and to all this, such a woman!—but of her I shall say nothing at all, in despair of saying anything adequate."

"In my song I have endeavoured to do justice to what would be his feelings on seeing, in the scene I have drawn, the habitation of his Lucy. As I am a good deal pleased with my performance, I, in my first fervour, thought of sending it to Mrs. O——, but on second thoughts, perhaps what I offer as the most honest increase of genuine respect, might, from the well-known character of poverty and poetry, be construed into some modification or other of that servility which my soul abhors."

Who Was Mrs. O——?

Now out of this letter at least two questions arise. Who was Mr. and Mrs. O——? What was the song, supposed to be written by the amiable husband to his wife in the days of courtship, when looking at the distant "town," or farm-house, in which the fair lady dwelt?

Incidentally, it may be noted that the use of "town" for "farm" is good Old English.

The song which Burns enclosed with his letter to Mr. Syme is given in the next column.

The answer to the second question is that the lady whom Burns so evidently admired was Mrs. Oswald, who, after five years of happy married life, died in Lieben a short two years after the death of the poet. Burns's biographer describes her as a "most accomplished and most lovely woman, worthy of the beautiful strain

of sensibility which will convey some impression of her attraction to other generations."

And now a strange thing has come to light. On March 11th were sold for £350 at Sotheby's auction some pages of Burns's exercise book, upon which is written, in the handwriting of the poet, not only notes of amiable articles like tea and tobacco, but this very poem, yet with some strange and astonishing departures from the accepted version printed herewith. The fourth stanza, for instance, read as follows:—

"Sweet blink the sun on yon town
Among the broomy braes see green,
But my delight in yon town,
And dearest pleasure is my Jean."
In fact, Jean is substituted for Lucy through-

O wat ye wha's in yon town,
Ye see the e'en'ing sun upon?
The fairest dame's in yon town,
That e'en'ing sun is shining on.

Now haply down yon gay green shaw,
She wanders by yon spreading tree;
How blest ye flow'rs that mind her blaw,
Ye catch the glances o' her e'e.

How blest ye birds that round her sing,
And welcome in the blooming year,
And doubly welcome be the spring,
The season to my Lucy dear.

The sun bleeks blithe on yon town,
And on yon bonnie braes of Ayr;
But my delight in yon town,
And dearest bliss is Lucy fair.

Without my love, not a' the charms
O' paradise could yield me joy;
But gie me Lucy in my arms,
And welcome Laphland's dreary sky.

My cave wad be a lover's bower,
Tho' raging winter rent the air;
And she a lovely little flower,
That I wad tent and shelter there.

O sweet is she in yon town,
Yon sinking sun's gone down upon;
A fairer than's in yon town,
His setting beam ne'er shone upon.

If angry fate has sworn my foe,
And suffering I am doom'd to bear,
I carenae quit aught else below,
But spare me, spare me, Lucy dear.

Far while life's dearest blood is warm,
As thought free her shall na'er depart,
And she—as fairest in her form!
She has the truest kindest heart.

and there is no mention of Ayr. Now, there was only one Joan for Burns, and that was Joan Armour whom he married, to whom he addressed some of his sweetest songs, and of whom he wrote: "Never man adored a woman more than I did her."

It has always been supposed that Burns wrote the song printed above when storm-bound at Ecclefechan, famous to-day as the birthplace of Thomas Carlyle, in February, 1795, and from whence he sent it to his friend in Dumfries. Now, did he write it there, or did he only revise a song he had written long before, and somewhat spoil it in the process, in order to pay a compliment to Mrs. Oswald?

This remarkable manuscript is described in the catalogue as "Lot 460. The property of a lady," and has set Burns lovers and students a pretty problem to discuss, and, if they can, to settle.

In Reply to John o' London.

(Continued from the previous page.)

home. He who once scuffed succumb sooner or later. He finds there is something in it, even for him, but he is diffident of admitting it. He looks on it as a vice, a bad habit, perhaps rather childish.

Now I come to that part of his letter which I have been longing to deal with:—

"But I wish also that there could be an exchange of experience between the silences of Nature and the hum of the city. I would set up my aerial to-morrow, if in the heart of London, I could hear the cattle lowing on remote hills, or the barking of a fox in Essex, or the scream of an eagle over a Scottish glen. I would gladly summon the roar of Niagara to redress the roar of the Strand; but such things are not yet."

We will give him the sounds of the country. We meant to all along. If only he had listened already, he would have known it. Why, we have already fixed the very spot from whence the liquid notes of the nightingales shall be borne in mystic aether waves to the home of the jaded town-dweller. Though we haven't yet broadcast the barking of a fox in Essex, we have provided the nearest substitute—the barking of a dog in Savoy Street. Niagara will come in due course, but won't the breakers at Brighton suffice meantime? It is all planned. Heretofore, all these and many other sounds have been artificially created. The real thing is coming, but even now we might get over a plausible imitation of Niagara with the bath-room tap.

Let "John o' London" beware lest, like Macbeth, he belittle too far the power of prophecy.

I cannot bear to think of the terrible isolation and reserve of "John o' London's" evenings. I feel that I want to carry along a loud speaker to his room and say "You shall listen to us." I will tell him now that, whether he likes it or not, his room is full of the strains of music, great symphony concerts, light operas, songs, stories of high adventure from the lips of the greatest explorers in the realms of science—all manner of things to suit even his every mood. Wave the magic wand, turn the switch, the Genie is at his service. But the aether waves are there, whether he turns it or not. They do not obtrude. They are not alighted by his neglect. They exercise their beneficent or enlightening functions for those who care. Perhaps it is better that he should not turn the switch. That list of technical names to publishers (three and a half inches of them) may have incited him to experiment. He may use reaction and oscillate to the extent of overgearing his neighbour's aerial.

If he absolutely will not listen, I foresee a dire and tragic fate awaiting him. One night there will be an R.O.S. from 21.0. "John o' London," who when last heard of was said to be travelling round the country in an isolated copper van, stopping only in areas reputed to be shielded from broadcasting, is urgently required by his former solicitors, as they have received notification of a large fortune left him."

There will be no reply.

And I shall be glad. The green carpet ripples.

WIRELESS IN THE WEST INDIES.

Seven high-powered wireless stations are shortly to be opened in the West Indies. These will be on the islands of St. Kitts, Antigua, Dominica, St. Lucia, St. Vincent, Grenada, and Barbados, and they will be operated by the Pacific Cables Board, which is under the joint control of the Imperial Government and the Governments of Canada, Australia and New Zealand.

Waterloo, par Victor Hugo.

The following poem will be broadcast from London Station by M. E. M. Stephan, on Tuesday, March 25th. It is printed here in French so that readers of "The Radio Times" may follow the speaker word by word. In this way, listeners will be enabled to correct any errors of pronunciation.

WATERLOO! Waterloo! Waterloo! morne plaine!

Comme une onde qui bout dans une urne trop pleine,
Dans ton cirque de bois, de cotéaux, de vallons,
La pâle nuit mêlait les sombres bataillons.
D'un côté c'est l'Europe et de l'autre la France.

Choc sanglant! des héros Dieu trompait l'espérance!

Tu désertais, victoire, et le sort était las.
O Waterloo! je pleure et je m'arrête, hélas!
Car ces derniers soldats de la dernière guerre
Font grande; ils avaient vaincu toute la terre.

Chassé vingt rois, passé les Alpes et le Rhin,
Et leur âme chantait dans les clairons d'airain!

Le soir tombait; la lutte était ardente et noire.
Il avait l'offensive et presque la victoire;
Il tenait Wellington acculé sur un bois.
Sa lunette à la main, il observait parfois

Le centre du combat, point obscur où trépassait
La mêlée effroyable et vivante broussaille,
Et parfois l'horizon, sombre comme la mer.
Soudain, joyeux, il dit: "Grouchy!"—C'était
Blucher!

L'espoir changea de camp, le combat changea d'âme.

La mêlée en hurlant grandit comme une flamme.
La batterie anglaise écrasa nos carrés.

La plaine où frissonnaient les drapeaux déchirés
Ne fut plus, dans les cris des mourants qu'on
égarait.

Qu'un gouffre flamboyant, rouge comme une
ferme;

Gouffre où les régiments comme des pans de
mur,

Tombaient, où se couchaient comme des épis
morts.

Les hauts tambours—majors aux panaches
énormes,

Où l'on entrevoyait des blessures difformes!
Carnage affreux! moment fatal! L'homme
inquiet.

Sentit que la bataille entre ses mains pliait.
Devant un mamelon la garde était massée.

La garde, espoir suprême et suprême pensée!
—Allez! faites donner la garde," cria-t-il—

Et lanciers, grenadiers aux gaites de corail,
Dragons que Rome eût pris pour des légion-
naires,

Cuirassiers, canonniers qui traînaient des ton-
nerres,

Portant le noir colback ou le casque poli,
Tous, ceux de Friedland et ceux de Rivoli,

Comprent qu'ils allaient mourir dans cette
fête,

Salueront leur dieu, debout dans la tempête.

Leur bouche d'un seul cri, dit: "Vive l'Em-
pereur!"

Puis, à pas lents, musique en tête, sans fureur,
Tranquille, souriant à la mitraille anglaise,

La garde impériale entra dans la fournaise.
Hélas! Napoléon, sur sa garde penché,

Regardait, et, si tôt qu'ils avaient débouché
Sous les sombres canons crachant des jets de
soufre,

Voyait, l'un après l'autre, en cet horrible
gouffre,

Fondre, ces régiments de granit et d'acier,
Comme fond une cire au soufflé d'un brazier.

Ils allaient, l'arme au bras, front haut, graves,
étiqués,

Pas en arrière. Dormez, morts héroïques!

Le reste de l'armée hésitait sur leurs corps
Et regardait mourir la garde—C'est alors

Qu'élevait tout à coup sa voix désespérée,
La Déroute, géant à la face effarée,

Qui, pâle, épouvantant les plus fiers bataillons,
L'abaissant subitement les drapeaux en haillons,

A de certains moments, spectacle fait de l'armée,
Se leva grandissante au milieu des armées,

(Continued on the next column.)

Official News and Views.

Gossip About the B.B.C.

THE broadcasting station KFI, of Los Angeles, which sent out the programme that was rebroadcast in this country in the early hours of March 9th, has the greatest range of any Pacific Coast station.

More American Broadcasting.

The American Station KDKA has arranged a programme for Saturday, the 20th March, for the benefit of British listeners. We hope to relay it from 11 p.m. till midnight.

The Mighty Atom.



SIR WILLIAM BRAGG.

The series was called "Concerning the Nature of Things," and dealt with (a) the atoms of which things are made, (b) the nature of gases, (c) the nature of liquids, (d) the nature of crystals—diamond, (e) the nature of crystals—ice and snow, (f) the nature of crystals—metals.

Sir William hopes to broadcast the second of these Talks, on "The Nature of Gases," on the 7th April, continuing the series on the 19th May, 2nd June, 10th June, and the 30th June.

London's New Station.

For some time we have been endeavouring to find a suitable site for the erection of a new transmitting plant for 2LO. We have at last been successful, and now await the decision of the London County Council upon the plans we have submitted. Should permission be obtained, we propose to erect two steel lattice towers 150ft. in height, and about 150ft. apart. A hut will be built in which the operating gear will be working, and one side of this we propose to have large windows so that the public can see the Station without interfering with the progress of the work.

The site we have chosen is on fairly high ground, not very far from the Studio. The power of the new station will be double that used at present, but that does not mean that the signal strength will be better, because in applying to the peculiar conditions of broadcasting from the centre of a town, the aerial constance cannot be calculated, nor the radia-

tion. On the face of it, however, will be double power, and a much more efficient aerial. The new station will certainly be at least as efficient as the present one. The public are warned, however, not to expect a tremendous increase in signal strength.

Broadcast Plays.

On Tuesday, April 1st, Mr. Lewis Casson is to produce three plays at the London Station. They will also be broadcast to Bournemouth and Glasgow. They will be *The Death of Tinseltown*, by Maurice Maeterlinck, *Box and Car*, by Madison Morton, and *The Man Who Sang in His Bath*, by Richard Hughes.

A Popular Orchestra.

On the 6th April, listeners to 2LO will have an opportunity of hearing De Groot and his Orchestra playing at the Piccadilly Hotel. This is one of London's most popular hotel orchestras, and it will be broadcast from 9 p.m. to 10.0 p.m. and from 10.15 p.m. to 10.30 p.m.

Wireless at the Boat Race.

A new attraction for the Boat Race festivities will be provided by 2LO between 2.30 and 4.30 p.m. on Saturday April 6th, when the Grenadier Guards Band will be broadcasting a special programme for the benefit of the crowds lining the river during the progress of the race.

Manchester's New Assistant Director.

Mr. E. H. Goldsmith, who has been appointed Assistant Station Director at Manchester, is a retired Paymaster Lieut-Commander of the Royal Navy. He has spent many years in the Mediterranean and around the coast of India and Ceylon. On the East-Indies Station he was attached to the staff of the Commander-in-Chief, Vice-Admiral Sir George Warrender, with whom he served in the North Sea during the war. Later, he was one of the three members of Lord Chamwood's ex-service students' Appeal Tribunal at the Board of Education. He also represented the Admiralty, on a Demobilisation Sub-Committee of the War Cabinet, the Demobilisation Co-Ordination Committee of the War Office, and the Officers' Re-Settlement Committee under Lord Burnham's chairmanship.

Since 1920, Mr. Goldsmith has been engaged in business both in London and on the Continent.

A New Musical Director.

Mr. W. A. Cross, who has been the Conductor of the Newcastle Wireless Orchestra for a considerable time, has now been appointed Musical Director to the Newcastle Station.

Continued from the previous column.

La Déroute apparut un soldat qui s'émeut,
Et, se tordant les bras, cria: "Sauve qui peut!"

Sauve qui peut! affront! horreur! toutes les
bouches

Criaient; à travers champs, fous, éperdus,
farouches,

Comme si quelque souffle avait passé sur eux,
Parmi les lourds caissons et les fourgons

poudreux!
Roulent dans les fossés, se cachant dans les

seigles,
Jetant stakos, manteaux, fusils, jetant les

aigles
Sous les sabres prussiens, ces vétérans, ô deuil!

Tremblaient, hurlaient, pleuraient, couraient!
En un clin d'œil

Comme s'enlevait au vent une paille enflamée,
S'élevait ce bruit qui fut la grande armée.

Et cette plaine, hélas, où l'on rêve aujourd'hui,
Vit fuir ceux devant qui l'univers avait fui!

Quarante ans sont passés, et ce coin de la terre,
Waterloo, ce plateau funèbre et solitaire,

Ce champ sinistre où Dieu mêla tant de néants,
Tremble encore d'avoir vu la fuite des géants!

Napoléon les vit s'écouler comme un fleuve;
Hommes, chevaux, tambours, drapeaux;—et

dans l'épreuve
Sentant confusément revivre ses remords,

Levant les mains au ciel, il dit:—Mes soldats
morts,

Moi vaincu! mon empire est brisé comme verre,
Est-ce le châtiement cette fois, Dieu sévère?

Alors, parmi les cris, les rumeurs, le sillon,
Il entendit la voix lui répondant: Non!

IMPORTANT TO READERS.

LETTERS FOR THE EDITOR should be addressed to "The Radio Times," 8-11, Southampton Street, Strand, W.C.2.

LETTERS FOR THE R.B.C. should be sent to 2, Savoy Hill, W.C.2.

"The Radio Times," the official organ of the British Broadcasting Company, Ltd., is concerned solely with broadcasting programmes and the technical problems relating to their transmission.

Technical inquiries dealing with the reception of broadcast telephony, such as the types of sets to be employed, etc., etc., should NOT be addressed to "The Radio Times." Letters from Readers concerning the programmes and their transmission are welcomed.

Letters requiring an answer MUST contain a stamped and addressed envelope.

THOSE "HOWLERS."

If you hear a howl in your receiver, you may be oscillating and interfering with thousands of people's pleasure.

To tell if you are oscillating, perform the following operation—

Alter your tuning.

If the NOTE of the howl varies as you vary your tuning, it is you.

It is not cricket to oscillate on purpose because you disapprove of a programme, as items, the B.B.C. or your neighbours.

Your neighbours may not agree with you.

Messrs. George Newnes, Ltd., have now prepared a handsome case in red cloth with gilt lettering for "The Radio Times," complete with cord down the back to hold a copy of this publication. A pencil is indispensable to the listener during the course of the programme, and this is included conveniently in a slot at the side. Listeners should order this to-day from any Newnes agent. It is published at 2s. 6d., or send 4d. extra to cover postage for a case from the Publisher, 8-11, Southampton Street, Strand, London, W.C.2.

ALTERATIONS TO PROGRAMMES, ETC.

AS THE RADIO TIMES goes to press many days in advance of the date of publication, it sometimes happens that the B.B.C. finds it necessary to make alterations or additions to programmes, etc., after THE RADIO TIMES has finally gone to press.

KEY LIST OF MUSIC PUBLISHERS.

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DO WORMS USE WIRELESS?

PROPOS the article in last week's *Radio Times* on "When Will Insects Broadcast?" it is interesting to note that the suggestion that earthworms communicate with each other by wireless is put forward by Mr. John D. Leckie in *The Occult Review*.

"Darwin noticed that the earthworms were in the habit of projecting the upper part of their body outside their burrow while the lower half remained embedded in the soil," he says. "The upper or protruding portion was raised erect in the air, and was sometimes waved in different directions. 'Is the earthworm occupied in sending wireless messages to distant friends?'"

Smoke and Fog—The Cause and Cure.

A Talk from Manchester, by Marion FitzGerald.

ISN'T it amazing that in the twentieth century, when such wonderful things are accomplished, somebody has not succeeded in clearing up the air of large towns? Pittsburgh can talk to Manchester by means of wireless; but neither Manchester nor Pittsburgh has got rid of its smoke.

It has been calculated that over the whole country three million tons of soot are poured out into the air every year. That means six million pounds worth of wasted fuel, for soot is, of course, only imperfectly burnt coal. But, worse than that, all this filth in the air will come down sometime and we have to clean up the mess. London has an annual soot-fall of nearly 40,000 tons.

If you live in a smoky town, your chances of dying of some form of disease connected with your breathing apparatus are nearly three times as great as if you live in the country.

Sending Up the Death Rate.

I haven't said anything yet about fogs; so far, I have been talking about the constant shower of soot which is falling day by day, year in and year out. Happily for us, fogs only come seldom, because the weather is generally a good friend to us. All the same, there is always enough soot in the air of towns to provide a good thick fog if the state of the atmosphere does not allow most of it to escape. It is well known that two or three days of fog will send up the death-rate—not from street accidents as you might suppose, but from bronchitis and pneumonia.

The cause of all this is our reckless and extravagant method of burning coal. No more and no less. We burn every year 100 million tons of coal in factories, and about 40 million tons in houses, and a large proportion of that is burnt in wasteful ways.

"Yes," you will say, "it is those dreadful factory chimneys that do all the harm. They ought to be stopped, and, surely, there is a law about it."

Wait a minute! Of course, they ought not to pour out black smoke, and there is a law about it; but are you quite sure they are the chief and only offenders?

Would it surprise you if I told you that of the two sorts of chimneys, house chimneys are much guiltier of polluting the air than factory chimneys; that not only do they make more soot, but it is a much nastier kind of soot—fatty and greasy? If you burn 100 lbs. of coal in a boiler furnace, you will get about half a pound of soot. If you burn the same amount in any ordinary domestic fireplace, you will get 6 lbs. of soot. That is twelve times as much.

So that the house chimney is just twelve times as bad for making smoke as the chimney attached to a factory.

Worth Some Sacrifice.

I expect by now some of you are looking anxiously at your own fires and saying you could not possibly give them up; they are so cheerful. Let us see if we can effect a cure for the smoke nuisance without making people unhappy. We once had a forerunner of smokeless cities—in the coal strike. We don't want more strikes, but wouldn't it be worth some sacrifice to get back to that condition of clean air, sunlight and clear views? For that, we must have an alteration in our present smoke laws to get rid of factory smoke, and we must also be willing to make changes in our ways of burning coal in houses. Instead of burning coal lavishly as at present, we must use it sparingly and employ other cleaner and smokeless methods of heating and cooking.

FOREIGN STATIONS.

FRANCE.

Eiffel Tower. PL. Paris. 2600 metres.
6.40 to 7.0 a.m.; 11.0 to 11.30 a.m.; 3.40 to 4.0 p.m.; 5.30 to 7.20 p.m.; 10.0 to 10.30 p.m.
Compagnie Française de Radiophonie (Emission Radiola). SFR. Paris. 1750 metres.
12.30 to 2.0 p.m.; 4.30 to 5.0 p.m.; 9.30 to 10.0 p.m.; Sundays and Thursdays Radio Dancing at 10.0 p.m. Close down at 10.45.
L'Ecole Supérieure des Postes et Télégraphes.
PTT. Paris. 450 metres.
Sunday 8.30 p.m.; Monday 9.0 p.m.; Tuesday 8.0 p.m.; Wednesday 3.45 p.m.; 8.45 p.m.; Thursday 8.30 p.m.; Friday 8.30 p.m.; Saturday 9.0 p.m.

SWITZERLAND.

Radio Station Marconi. TSF. Geneva. 1100 metres.
Wireless transmissions daily (Sundays excepted) 1.15 to 1.30 p.m.

Lausanne. HB2. 1100 metres.
4.0 p.m. Tuesday, Thursday, Saturday.
7.0 p.m. Monday, Wednesday, Friday, Saturday.

NETHERLANDS.

Radio-Electrique, Brussels. 410 metres.
5.0 p.m. Music. 8.30 Concert.
Poste de Haguen, Brussels. BAV. 1100 metres.
At intervals 1.0 to 5.30 p.m. daily. News and Weather Report.
9.0 p.m. Concert, Tuesdays only.

HOLLAND.

The Hague. PCGG. 1070 metres.
3.0 to 5.0 p.m. (Sunday); 8.40 to 10.40 (Monday and Thursday).
Labor. Heussen. PCDU. 1050 metres.
1070 metres.
9.40 to 10.40 a.m. (Sunday) Concert; 9.40 to 10.40 p.m. (Sunday) Concert; 7.40 to 9.40 p.m. (Tuesday) Concert; 7.45 to 10.0 p.m. (Thursday) Concert.

Veithuyzen. PCKK.
8.40 to 9.40 p.m. (Friday) Concert.

Amsterdam. PA5.
7.40 to 9.10 p.m. (Wednesday) Concert.

The above times are all Greenwich Mean Time.

AMERICA.

General Electric Co. WGY. Schenectady, N.Y. 380 metres.
Radio Corporation of America. WJZ. New York, N.Y. 455 metres.
John Wanamaker. WOO. Philadelphia, Pa. 609 metres.
L. Hamburger and Co. WOB. Newark, N.J. 405 metres.
Post Dispatch. KSD. St. Louis, Mo. 540 metres.
Rensselaer Poly. Inst. WHAZ. Troy, N.Y. 380 metres.

PEOPLE IN THE PROGRAMMES—GOSSIP ABOUT ARTISTES & OTHERS

A Vain Sacrifice.



MISS CHRISTINE FITZ.

MISS CHRISTINE FITZ, the popular contralto singer at Aberdeen Station, relates an amusing story about a family who had only one pair of headphones to their receiving set. There was, naturally, as a rule, great competition amongst them as to who should use the 'phones; but when they were visited by an old aunt from the

country, they handed them over to her as a great treat.

The visitor had never listened before, and the whole family sat watching her, consoled, in spite of their sacrifice, by the thought of the pleasure she was deriving.

They sat for nearly an hour, until, at last, the youngest boy could stand it no longer, and exclaimed: "Well, auntie, what can you hear?"

"I can't hear a sound," she replied, placidly, "but I am making up some lovely tunes in my own head."

Opera Under Fire.

UNDOUBTEDLY one of the most talked-of operas that have been broadcast recently is *The Doge of Devon*. Mr. W. K. Bullock, the composer, tells me that he wrote most of the music at odd moments—in the train and elsewhere.

"The most exciting conditions under which I have ever heard my music," he added, "was when I heard a gramophone record of one of the songs played just behind the lines near Diekebusch, early in 1918, the enemy shelling vigorously the while."

Besides being a composer, Mr. Bullock is an accomplished organist, being a Fellow of the Royal College of Organists. In 1908 he was appointed to the little-known post of Lay Vicar of Westminster Abbey, in succession to Mr. Frederick Renshaw.

Soldier and Author.



CAPT. FRANCIS GRIERSON.

CAPTAIN FRANCIS D. GRIERSON, whose "Talks" from London Station are always welcomed by listeners, has had an interesting literary career. Besides contributing to many of the leading English and American papers, he has published two novels and a book on military law. He has also edited a monthly magazine and helped to edit a news-

paper. Captain Grierson served for a long time in the Territorial Army, and during the war he became a Staff Officer.

Very Awkward.

CAPTAIN GRIERSON relates a story about an indignant man who visited an editor.

"I was one of the competitors at that boxing match last night," he said, "and in your paper you have alluded to me as the 'well-known light-weight champion.'"

"Well, aren't you?" inquired the editor.

"No, I'm nothing of the kind," replied the visitor, "and it's awfully awkward, because I'm a coal merchant."

Father's Warning.

SIR WALFORD DAVIES, Director of Music at the University of Wales, who is to give the first of a series of talks on Music on April 4th, relates an amusing experience which occurred while he was hearing a rehearsal of one of his cantatas.

"I could not help noticing," he says, "that the clarinet player, a young man, but a clever and steady lad, jumped a good deal during the progress of the rehearsal. Then I found that his father, who played the trombone, sat just behind him, and every now and then he gave his son a kick, with the remark: 'Look out, Sammy, there be a flat a-coming!'"

Singer and Composer.

A WELL-KNOWN bass singer in the North of England, Mr. David Jenkins has lately become a favourite at London Station. A native of Lancashire, he first went in for a commercial career, but finding this un congenial, he (to quote his own words), "took the plunge into the whirlpool of music, and, after some furious floundering, is beginning to float into calmer and more pleasant waters."

At one time he held a singing scholarship at the Royal Academy of Music, but he says that he resigned it "because of certain decided opinions of his own regarding the future of his voice."

Mr. Jenkins is a brilliant pianist, and has composed a number of songs which he sings himself with great success.

The Real Annoyance.



MISS MURIEL G. GALTON.

MISS MURIEL G. GALTON, who has achieved popularity at Bournemouth, has a fine voice of a rather unusual type. She is a mezzo contralto, and is heard to particular advantage by wireless. Miss Galton tells me that she recently heard the following amusing conversation—

A visitor remarked to his friend: "Doesn't that chap next door annoy you with his constant singing in his flat?"

"Not nearly so much as his constant flat in his singing," was the reply.

A Famous Tennis Player.

A GREAT authority on tennis is Mr. C. L. Cooper-Hunt, whose talks on the game from Bournemouth have proved very acceptable. Mr. Cooper-Hunt was selected as a member of the Cambridge University Grasshoppers' Club, and played for the University's first VI. as far back as 1907. He also played a great deal in Hong Kong with Mr. H. A. Nisbet, the old International and one-time partner of H. L. Doherty, the famous champion.

Last December he was a member of the Hampshire team which defeated Hertfordshire in the Men's Hard-Court Inter-County Championship.

Mr. Cooper-Hunt is the possessor of over thirty trophies that he has won at various times, and he told me the other day that, although ill-health has prevented him lately from competing much in Tournaments, he is still a keen student of the game, and experiences the greatest interest in trying to impart his enthusiasm to others.

The Havana Band Leader.



MR. CYRIL NEWTON.

York's most successful bands.

THERE are few wireless artistes more popular with listeners than Mr. Cyril Newton, the leader of the famous Savoy Havana Band! For besides playing the violin, he also has a fine singing voice. Before coming to the Savoy, Mr. Newton lived for many years in America and led some of New York's most successful bands.

What—Why?

MR. NEWTON relates a story about a little boy who was taken to his first concert. A celebrated soprano was singing and an equally celebrated conductor was in command.

"Ma," exclaimed the youngster in a loud voice, "why is that man shaking his stick at the lady?"

"Hush, dear!" replied his embarrassed mother, "he is not shaking his stick at her."

But the young hopeful was not to be convinced.

"Then what is she screaming for?" he asked.

Why He Liked It.

THE other day, Mr. Stan Hatton, who has become a favourite at Sheffield Station, told me a good story.

An Irishman who had lived in a remote country district all his life, eventually went to live in a big town. One day a friend called to see him and remonstrated with him forcibly on his very old-fashioned methods of house-keeping.

"Now that you've come to live here," he said, "you must be more up-to-date. You should get gas laid on and have a gas fire installed."

The Irishman promised that he would do so at once, and a few months later his friend came again.

"Well, Pat," he said, "how do you like your gas fire?"

"It's fine!" replied Pat. "D'you know, it hasn't gone out since I lit it about a month ago!"

Two Kinds of Shells.



MISS IDA COWEY.

A PROMISING young artiste at Newcastle is Miss Ida Cowey, soprano. Miss Cowey is fond of telling this amusing theatrical story. An actor and a soldier were discussing their respective callings. "How would you like to stand with shells bursting all round you?" demanded the man of arms.

"Well," replied the actor, quickly, "it would

depend upon the age of the eggs."

To ensure getting "The Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

Broadcast Music of the Week.

Described by Percy A. Scholes.

LONDON, SUNDAY.

D'Indy's "Fervat" Prelude.

Many listeners made an acquaintance with D'Indy through his *Intar*, given at the first of the Westminster Central Hall concerts, under Mr. Pitt's direction. Mr. Pitt appears to be a great admirer of the rather neglected D'Indy, and has not waited long to carry his propaganda further.

Fervat is a music drama, produced at Paris in 1898. Its hero is a young Celtic chief, who, lured by his Druid advisers, defends his country from Saracen invaders, but falls in love with Githen, a Saracen princess. *Fervat* is defeated, but Githen dies, and the curtain drops as *Fervat* is seen carrying her in his arms towards the mountain peaks from which is heard a mystical choir calling him, and announcing to the world the coming of a new and better religion.

The essential subject of the drama is the conflict between "the cold and rigid religion of the ancients, and the warm religion of love" (Louis Bergeron: "Vincent d'Indy: sa Vie et son Œuvre").

LONDON, TUESDAY.

Harpsichord Music.

The Harpsichord is one of the precursors of the Pianoforte. In a simpler or more elaborate form, it was played by Queen Elizabeth and the musicians about her Court, by Purcell, by Bach and Handel, by Haydn, Mozart, and the younger Beethoven. Then the Pianoforte superseded it, and it has only lately been effectively revived. Mrs. Gordon Woodhouse, the player to-night, is one of its chief modern exponents.

The essential difference between Harpsichord and Pianoforte is that in the former the strings are plucked when the keys are depressed, and in the latter they are hammered.

The instrument in its most developed form, as in the example played by our performer to-night, has two keyboards, and an array of stops and pedals, by which many fine effects of contrast can be obtained.

This is probably the first occasion upon which Harpsichord music has ever been broadcast, and it will be of interest to note how the instrument's clear, incisive tone "carries." My own guess is that it will transmit better than pianoforte tone.

ABERDEEN, SUNDAY.

Haydn's "Surprise" Symphony.

The impresario, Salomon, in 1793-4, brought Haydn over to England, for three visits which were enormously successful. Part of the bargain was that Haydn should compose some special Symphonies, and twelve were thus brought into existence.

These twelve are the best Haydn ever wrote, and the following conversation is recorded:—

SALOMON: "Sir, I think you will never surpass these Symphonies."

HAYDN: "Sir, I never mean to try!" And he never did, for though he lived seventeen years longer (until 1809) he never wrote another.

Why is this one of the twelve called "The Surprise"? The name comes from one chord in the Second Movement. This Movement begins very softly, on strings, alone. Then suddenly comes a crash from the whole band—strings, wind and drums.

A friend called on Haydn, just as he had finished composing this Movement. Haydn played the Movement to him on the piano and remarked: "Dat sure to make de ladies jump!"

There are four Movements:—

I. Slow Introduction, followed by a lively piece of music.

II. A gentle, but steadily moving Air with Variations, with the "Surprise" in the 10th bar.

III. A bold and happy Minuet, alternated with a quieter and more flowing one.

IV. A quick, jolly Movement. Note the many instances of Haydn's playful use of alternation of Wind and Strings.

CARDIFF, SUNDAY.

De Falla's Dance from "The Three-Cornered Hat."

De Falla is the leading living Spanish composer. He was born in 1876.

The story of the ballet, *The Three-Cornered Hat*, is taken from the nineteenth-century Spanish novelist Alarcón. It is about the Governor who flirts with the miller's wife, but falls into the mill-stream, and is merrily mocked by all the villagers.

The music of the Ballet is gay, and very Spanish in its rhythms and orchestral colours.

GLASGOW, TUESDAY.

Debussy's Submerged Cathedral.

"*La Cathédrale Engloutie*" is the purest and strongest thing I know in modern French music. . . . On most listeners it produces a very immediate if at first vague impression. But it is only gradually that we can fully discern the astounding dignity and imaginativeness of this vision of a cathedral under the sea, with its bells and its plain-chant harmonies pealing up through the water. The last half-dozen lines, in particular, seem to me as big music as anyone can want." (DR. ERNEST WALKER.)

GLASGOW, WEDNESDAY.

Bach's Brandenburg Concerto, No. 1.

It is really a wonderful Bach programme that Glasgow is offering on this night. Such a programme announced for the Queen's Hall would fill it.

Bach's six Brandenburg Concertos were made for a Count of Brandenburg, a great lover of music who was making a collection of Concertos by contemporary composers, for his private band to perform. When the Count died and his property had to be valued, the Bach works were, in the inventory, lumped together with 171 concertos by other composers, valued at four groschen (say 3d.) apiece—a modest estimate!

These are not Concertos in the modern sense of the word—i.e., compositions for some solo instrument with Orchestra. This first Brandenburg Concerto is written for three Oboes, two Horns, Bassoon, Solo Violin, and Strings. There are four Movements:—

I. Quick, merry, and bantering.

II. Slow and expressive (note the long florid Oboe solo with which it begins, a moment later taken over by Solo Violin, and a moment later still by Cellos, Double Basses, and Bassoon).

III. Quick and lively.

IV. A Minuet (all the instruments). A Trio (two Oboes and Bassoon). The Minuet repeated. A Polacca (Strings alone). Another Trio (two Horns and Oboes). The Minuet repeated.

MANCHESTER, THURSDAY.

Harry's "With the Wild Geese."

"The Wild Geese" was the name given to the Irish Brigade in the service of France—a brigade that found its origin in the exiles of the end of the seventeenth century.

At Fontenoy, in 1745, the French (thanks to a Irish Brigade, it is said) beat the English,

the Dutch, and the Austrians. Believe what you like of what follows—

During the night following the battle the bodies of the "Wild Geese" rose and flew away, and by dawn the flock was seen on the coast of Ireland.

"Jesus save you gentry! Why are ye so white, Sitting all so straight and still, in this midy light?"

"Nothing ails us, brother; joyous souls are we, Sailing home together on the morning sea."

That verse is from one of the two poems (by the Hon. Emily Lawless) prefixed by the composer to his score.

The course of the music is as follows: (a) A slow Introduction (sad thoughts of the exiles?); (b) A quick Irish tune by the Flutes and another by Flutes and Piccolo (the spirit of Irish adventure?); (c) A quieter passage, with its peaceful Oboe tune broken here and there by a touch of military music; (d) Night music, very quiet, but with an undercurrent of anticipation of the strife of the morrow; (e) A trumpet call, and the Irish tune again, used this time with a suggestion of battle; (f) A final section which suggests the resurrection of the warriors, their flight to Ireland and their apotheosis.

McEwen's "Solway" Symphony.

This was composed in 1911, in the district from which it takes its title, and expresses in music its composer's reaction to the experiences indicated in the titles of the three Movements and the verses prefixed to them.

I. SPRING TIDE.

"Long golden sands, edged with a silver streak, The impetuous surge that races to the shore, The full and steady motion of the flood— When sun and moon combine to tug the tide."

II. MOONLIGHT.

"The third ocean crawls along the beach, Sobbing a wordless sorrow to the moon."

III. THE SOUTH-WEST WIND.

"Sun, wind and cloud shall fall not from the face of it. Stinging, ringing spindrift, nor the folk nor flying free—"

An account of the composer's career appeared in *The Radio Times* of February 22nd. The score of the "Solway Symphony" was published at the expense of the Carnegie Fund, and the Carnegie Administration wrote of it, "A symphony of remarkable beauty, poetic, well-written and original in conception. The slow movement may rank with any piece of symphonic work that has been written in this country; and the whole composition is full of atmosphere, rhythm and colour."

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Radio Pioneers of Long Ago.

Romances of the Early Experimenters. By Reginald Pound.

OF the multitude of wireless enthusiasts listening to-day how many, one wonders, give so much as a fleeting thought to those early pioneers whose genius has made of the wireless dream a wonderful reality?

For, let there be no mistake, wireless telegraphy, like many other modern developments, has its roots more deeply in the past than most of us realize. When Senatore Marconi raised wireless from the laboratory stage to the realm of practical science thirty years ago, he crowned with his fertile genius the labours of men who many years before had been experimenting with the object of signalling by wireless. Faraday, Henry, Clerk Maxwell, Hertz, Brandy, Preece, Willoughby Smith—these are names that convey little and, perhaps, even nothing to the lay mind, which, however, owes much to these and other pioneers on whose modest, but vital, accomplishments is based the knowledge that is ours to-day.

An Unknown Genius.

That wireless was preceded by telegraphy with wires it is hardly necessary to remind the reader. The subject of the electrical transmission of messages first received attention in the middle of the eighteenth century, when an anonymous letter appeared in the *Scots Magazine* advocating the use of as many insulated conductors as there are letters in the alphabet, following the discovery by Gray and Wheeler, two of the earliest experimenters, that the electrical energy of a charged Leyden jar may be conveyed by an insulated wire.

Each wire, it was suggested by the unknown correspondent, should be used for the transmission of one alphabetical letter, and a complete message sent by operating the various wires in succession, the reception of the message being recorded by the movements of slips of paper attached to the terminals, every slip being marked with a letter.

But it was not until nearly fifty years had passed that the first glimmerings of the wireless age appeared above the horizon of science.

Five years before the close of the romantic "seventeen-hundreds," a Spanish scientist, named Salva, read a paper before the Academy of Sciences at Barcelona in which he said:

"If earthquakes be caused by electricity going from one point charged positively to another point charged negatively, as Bertolon has shown . . . one does not even want a

cable to send across the sea a signal arranged beforehand. One could, for example, arrange at Mallorca an area of earth charged with electricity, and at Alicante a similar space charged with the opposite electricity, with a wire going to, and dipping into, the sea. On leading another wire from the sea-shore to the electrified spot at Mallorca, the communication between the two charged surfaces would be complete, for the electric fluid would traverse the sea, which is an excellent conductor, and indicate by the spark the desired signal."

Commenting on this in his "History of Wireless Telegraphy," Fable, the noted historian of telegraphic developments, says: ". . . we shall see that Salva's idea is, after all, not so extravagant as it seems. We now know that large spaces of the earth can be electrified, giving rise to the phenomenon of 'bad earth,' so well known to telegraph officials."

The Spaniard's suggestion, however, was not regarded as being anything more than a flash of genius of which, perhaps, its novelty was its chief claim to attention.

Discovered by Accident.

In 1838, K. A. Steinheil, of Munich, had forced on him by accident the realization of the possibilities of wireless telegraphy, and to the experiments he conducted may be traced most of the early developments of the science. A noted German philosopher hinted to Steinheil that the two rails of a railway might form suitable conductors in telegraphic experiments. It was only an idea, but, acting on it forthwith, Steinheil soon proved its value.

He took his apparatus to the Nuremberg-Furth railway, where, as the outcome of the fact that he was unable to obtain an insulation of the rails good enough for his purpose, he discovered that the great conductivity of the earth rendered it possible to dispense with the "return" wire, and to make use of the earth instead. From this simple, but important, discovery there sprang the use of what is known as the earth return—an essential feature of practically every telegraphic circuit.

It was as a result of this discovery that Steinheil was inspired to visualize a time when "wireless" telegraphy would supplant the older order.

(To be continued.)

The Oscillation Nuisance.

An Official Effort to Assist Listeners

HOW YOU CAN HELP.

THE following important notice is issued by the officials of the British Broadcasting Company:—

In order to find out what localities are suffering from oscillation and to what extent oscillation is upsetting our service, we should be obliged if all those who are irritated by this prevalent nuisance would be so good as to send in a report framed as below to "Oscillation," the British Broadcasting Co., 2, Savoy Hill, London, W.C.2. We ask you to report oscillation troubles always in this way as it enables us so much more easily to tabulate statistics and to report clear cases to the authorities.

We do not wish to adopt a "policeman's" attitude, as we feel that in ninety-nine cases out of a hundred people oscillate through ignorance. In persistent and proved cases, however, where malignity or gross carelessness can be proved, we mean to ask the Post Office to take action.

We have distributed many thousands of pamphlets on how to prevent a set oscillating. We hope to distribute many thousands more, so if you have any distributing powers write to 2, Savoy Hill, for 5, 10, 100, or 1,000 pamphlets if you can get rid of them to those who may benefit.

Below is set out the type of information we require when you are bothered by oscillation:—

*YOUR NAME.....

*YOUR ADDRESS.....

*NATURE OF COMPLAINT (Duration, intensity, whether constant or intermittent, etc.)

NAME AND ADDRESS OF OFFENDER (if known)

* Will be treated confidentially.

† This must be given to help us in locating the area of interference.

‡ It is useless to make wild guesses; this information is not to get people into trouble; they may be doing it unwittingly. (In cases of persistent trouble, however, the information may be useful.)



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The Power that Pelmanism gives is fully explained in "The Efficient Mind." No thoughtful, earnest, ambitious man or woman can afford to miss the opportunity of writing for a free copy of this book to-day.



CANON HANNAY
(George A. Birmingham).

Photo by
E. O. Hopper.

The well-known author of "Spanish Gold," "The Last Trek," "General John Regan," and many other well-known books. His views on Pelmanism are amongst those quoted in the free book mentioned below.

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95, Pelman House, Bloomsbury St., London, W.C.1.

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WIRELESS PROGRAMME—SUNDAY, March 23rd.

The letters "S.B." printed in italics in these programmes signify a Simultaneous Broadcast from the station concerned.

LONDON.

2.0-2.15—*Time Signal from Big Ben.*
2.15-2.30—THE BAND OF H.M. GRENADEER GUARDS.

By permission of
Col. R. N. Sargison Brooke, C.M.G., D.S.O.

Director of Music,
Lieut. G. MILLER, L.R.A.M.

"Marche des Mousquetaires" *Benito*
Overture, "Stradella" *Filipe*
Cortez, Solo, "So Fair Thou Wilt" (Sara from "Doris") *Leifer*

(Soloist, Miss W. West)

MAVIS SHREVE (Songs at the Harp).

"Away on the Hill" *London Herald (S)*
"Little Winding Road" *For D'Acqua*

E. KENDAL TAYLOR (Solo Pianoforte).

"As I heard it from" *And*
Polonaise in A Major ("The Military") *Chopin*
ROMANO CLAROFF (Russian Tenor).

"Berceuse" *Grieg*
"Air and Cavatina of Violin" ("Primo Igno") *And*

"An Printemps" *Debussy*
"Gives Me Oblivion, Unleashed" *Napier*

The Band.

Knappey, No. 2 *And*
Selection from the Songs of Pauline Viardot *And*
March "Stradella" *And*

"On Wings of Song" *Mendelssohn*
"If I Might Only Come to You" *Spencer (S)*

E. Kendal Taylor.

Slow Air and Quick Dance *Stephen Williams*
Study in E Flat *Palani*

"When Night Descends" *And*
"Spring Water" *And*

Selection, "La Cigale" *And*
Rondo Capriccioso *Mendelssohn*

2.50-3.00—CHILDREN'S CORNER. S.B. from Man-
chester.

3.00-3.15—Hymn, "Ye Holy Angels Brigh" (E.H. 117, A and
M. 144).

The Rev. Dr. JOHN G. VANCE, M.A., Ph.D., etc., Vice
President of St. Edmund's College, Religious Address.

Hymn, "When I Survey" (E.H. 107, A and M. 108).

Antiphon, "O Saviour of the World" (E.H. 107, A and M. 108).

Light Symphony Concert.

Conducted by Percy Pitt.

THE AUGMENTED WIRELESS ORCHESTRA.

Solo Pianoforte, HERBERT FRYER.

Overture, "Mireille" *And*
Prelude, "Festiva" *And*
Pavane, Dance *And*
Concertino in F Minor, for Piano and Orchestra *And*
Serenade *And*

10.0-10.15—TIME SIGNAL FROM GREENWICH AND
GENERAL NEWS BULLETIN. S.B. in all Stations,
except Cardiff.

Local News and Weather Forecast.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

10.45—Close down.

BIRMINGHAM.

2.0-2.15—THE STATION ORCHESTRA.

under the direction of JOSEPH LEWIS.

Overture from "Tannhauser" *Wagner*
Pavane, Dance *And*
Concertino in F Minor, for Piano and Orchestra *And*
Serenade *And*

10.0-10.15—TIME SIGNAL FROM GREENWICH AND
GENERAL NEWS BULLETIN. S.B. in all Stations,
except Cardiff.

Local News and Weather Forecast.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

10.45—Close down.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

10.45—Close down.

10.15-10.30—Two Hungarian Dances *And*
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10.45—Close down.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

10.45—Close down.

AMY CARTER (Contralto).

"The Silver Song" *And*
"The Blackbird" *And*
HAROLD CASEY (Baritone).

"Nazareth" *And*
STATION ORCHESTRA.

2.50-3.00—Overture, "Stadella" *And*
Symphony, "The Military—No. 12 in G" *And*
Serenade, "Serenade No. 2" *And*
March, "March" *And*
Selection, "Songs Without Words" *And*

10.0-10.15—NEWS. S.B. from London.

Local News and Weather Forecast.

10.15—Close down.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

10.45—Close down.

10.15-10.30—Two Hungarian Dances *And*
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"Boys' March" *And*

10.45—Close down.

10.15-10.30—Two Hungarian Dances *And*
Serenade in B Flat Minor *And*
Tombola in A Flat, Op. 53 *And*

"Boys' March" *And*

MANCHESTER.

2.0-2.15—Request Programme.

RADIO MILITARY BAND.

Conductor, HARRY MONTGOMERY.

March, "The Boys" *And*
Selection, "Carmen" *And*
Serenade, "The Tale of the Bell" *And*

JENNIE COPELAND (Soprano).

Songs, Selected.

Overture, "Rienzi" *And*
Morceau Myrse, "Salut d'Amour" *And*
Suite in F Major *And*

Jennie Copeland.

Songs, Selected.

Selection, "Carmen" *And*
Morceau Myrse, "Salut d'Amour" *And*
Suite in F Major *And*

Jennie Copeland.

Songs, Selected.

Selection, "Carmen" *And*
Morceau Myrse, "Salut d'Amour" *And*
Suite in F Major *And*

Jennie Copeland.

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Suite in F Major *And*

Jennie Copeland.

Songs, Selected.

Selection, "Carmen" *And*
Morceau Myrse, "Salut d'Amour" *And*
Suite in F Major *And*

Jennie Copeland.

NEWCASTLE.

2.0-2.15—THE WIRELESS SYMPHONY ORCHESTRA.

Conductor, W. A. CROSS.

Allegro from the "Jupiter Symphony" *And*
LILY ADAMS (Contralto).

"Good Morning, Brother Sunshin" *And*
"Blind Nod" *And*

JACK TODD (Tenor).

"East Nod Ye, O Israel" *And*
"Sanctuary" *And*

ALFRED SEABRIDGE (Solo Violin).

Andante from "Cocorico" *And*
"La Procession" *And*

Andante from "Jupiter Symphony" *And*
Jack Todd.

"If With All Your Heart" *And*
"Home is Where You Are" *And*

Scherzo and Finale from "Jupiter Symphony" *And*
Lily Adams.

"There are Paths in the Garden of Our Garden" *And*
Lily Adams.

"The Magic of Thy Presence" *And*
Alfred Seabridge.

"Allegretto" *And*
"Children's Dance" *And*

Jack Todd.

"Where'er You Walk" *And*
Orchestra.

Ballet Music, "Pavane" *And*
Andante from "Cocorico" *And*

5.0-5.15—CHILDREN'S CORNER. S.B. from Manchester.

5.15-5.30—DURHAM CITY WEST END MALE VOICE
CHOR.

"Shades of the Morn" *And*
"As the Moments Roll" *And*

5.40—Hymn, "Through the Night of Doubt and Sorrow,"

5.45—The Rev. W. G. PECK, Religious Address.

5.50—Hymn, "Praise the Lord."

5.55—Ralph Jacobson (Solo Cell).

"La Solve" *And*
Choir.

"Music, All Powerful" *And*
"The Vision" *And*

5.25—WILLIAM A. CROSS (Solo Pianoforte).

Impromptu, Op. 90, No. 2 *And*
Simple Aven" *And*
"Ave Maria" *And*

5.45—Choir.

"Come, Let Us Join the Roundelay" *And*
"How Sweet, How Fair" *And*
"My Dear Mistress Had a Heart" *And*
"With Sigh, Sweet Rose" *And*

10.0-10.15—NEWS. S.B. from London.

Local News and Weather Forecast.

10.15—Close down.

Announcer, C. R. PARKER.

CARDIFF.

An Hour of Good Music.

Vocalist, LORNA MANSFIELD (Contralto).

Solo Pianoforte, AMY BERNARD COOK.

Solo Violin, LENA MASON.

Recitals, EDITH LESTER-JONES.

Pianoforte Solo.

"Nocturne No. 1" (Op. 15) *And*
"Intermezzo in C Sharp Minor" *And*
"Waltz in A Flat" (Op. 45) *And*

2.0-2.15—Songs.

"As a Southerner of Mine" *And*
"Thou'rt Like a Lovely Flower" *And*
"O Wondrous Mystery of Love" *And*

2.50—Violin Solo.

Sonata for Violin and Piano in F Major (Op. 24)—First
Movement only *And*
Recitals.

"Ardina" *And*
Lyric from "Mozart" *And*

4.0—Pianoforte Solo.

"Rigolotto" *And*
"The Willow Song" *And*
"Cradle Song" *And*

4.50—Violin Solo.

Air on G String *And*
"Schön Romanin" *And*
5.0-5.15—CHILDREN'S CORNER. S.B. from Manchester.

5.15-5.30—CHOIR OF BARRY DOCK WESLEYAN
CHURCH.

Hymn, "At Even ere the Sun was Set" *And*
Antiphon, "O Saviour of the World" *And*
The Rev. J. WILLIS BESKINWORTH, Barry Dock
Wesleyan Church, Barry Dock, Religious Address.

Hymn, "O Day is Dying in the West."

Spanish Night.

THE STATION SYMPHONY ORCHESTRA.

Conductor, OLIVER RAYMOND.

Vocalist, JOHN COSS.

5.30-5.45—"Fandango" *And*
"Rhapsody Espana" *And*
III. Songs, Selected.

IV. "Fantasia Espagnole" *And*
V. Songs, Selected.

VI. Three Pieces from "The Three-Cornered Hat" *And*
VII. "Carmen,"

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British
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Only.



Kuchen,
Mon.

"Please forward me two pairs of your famous 'Ericsson' 4,000 ohm 'phones. I have personally tested your make of 'phone against seven other 'phones' and find that 'Ericssons' are the 'goods' every time. I have recommended them to several of my wireless friends who, after trying them, are loud in praise of the quality of speech and music (not to mention Morse sign) rendered by your make of 'phones.'"

(Extract from letter to us.)

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rose, Salford; W. J. Surp & Co.,
Trades House, Birmingham 14-15,
New B. 1, Scotland, Malvern, Birm-
ingham, 53, Rotherham Street, Glasgow,
N. E. England: Messrs. H. A. Newson,
on Tyne, Newcastle 121 High Street.

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—but that 1 was an
Ericsson Headset

PERFORMANCE is the supreme test of telephones and the performance of Ericsson (British) Telephones stamps them as head and shoulders over any 'phone on the market to-day. The accompanying letter testifies to this.

Superbly made, comfortable, robust in construction, yet extraordinarily sensitive in operation they are the ideal telephone for extra results on any set, valve or crystal.

	Prices:	
120 ohms	24/6	
2,000 "	25/6	
4,000 "	26/6	

Look for "Ericsson Beeton Notts" on each earpiece —this is missing from the Continental imitations.

Write us to-day for lists and information of our valve and crystal sets, also our famous "Super Tone" Loud Speaker.

The British L.M. Ericsson Mfg. Co., Ltd.,
International Buildings,
67, 73, Kingsway, London, W.C.1.

Ericsson
(British)
Telephones



Light at its best

LAMPS are the most important material item in any lighting installation; and it is, of course, essential that only lamps of proved worth and established repute should be used.

It is, however, of even greater importance that the lamps and other equipment should be selected and arranged in such a manner as will ensure the greatest possible benefit from the light produced. Good lighting—whether in the factory, shop or office—is the product of good lamps and right planning.

In other words use Mazda lamps—which are unsurpassed in lighting qualities—and have your installation planned for maximum effect and efficiency. Thus you will get "light at its best."

Imported by The British Thomson-Houston Co. Ltd.



Radio Valves



B5 Type.



R Type.



B4 Type.

THE amber-tinted bulb of the R type and B4 valves, and the silvered bulb of the B5 valve are the outward and visible signs of a perfect vacuum. The colouring of the bulbs is an incidental result of a process which produces a high and permanent vacuum. Bear this point in mind and buy B.T.H. valves always.

B5 TYPE VALVE, 30/- each. The latest development the B5 valve takes only 0.06 of an ampere, and can be operated on standard dry cells.

Filament volts	—	2.5 to 3 volts
Filament current	—	0.06 amp
Anode volts	—	20-30 volts

R TYPE VALVE, 12/6 each. There is no better "general purpose" valve than the amber tinted B.T.H. R type. It can be operated on 4, 6, or 8 amp. or on a 100 volt a.c. supply. It is a very efficient reflex and other valve.

Filament volts	—	4 volts
Filament current	—	0.63 amp
Anode volts	—	40-60 volts

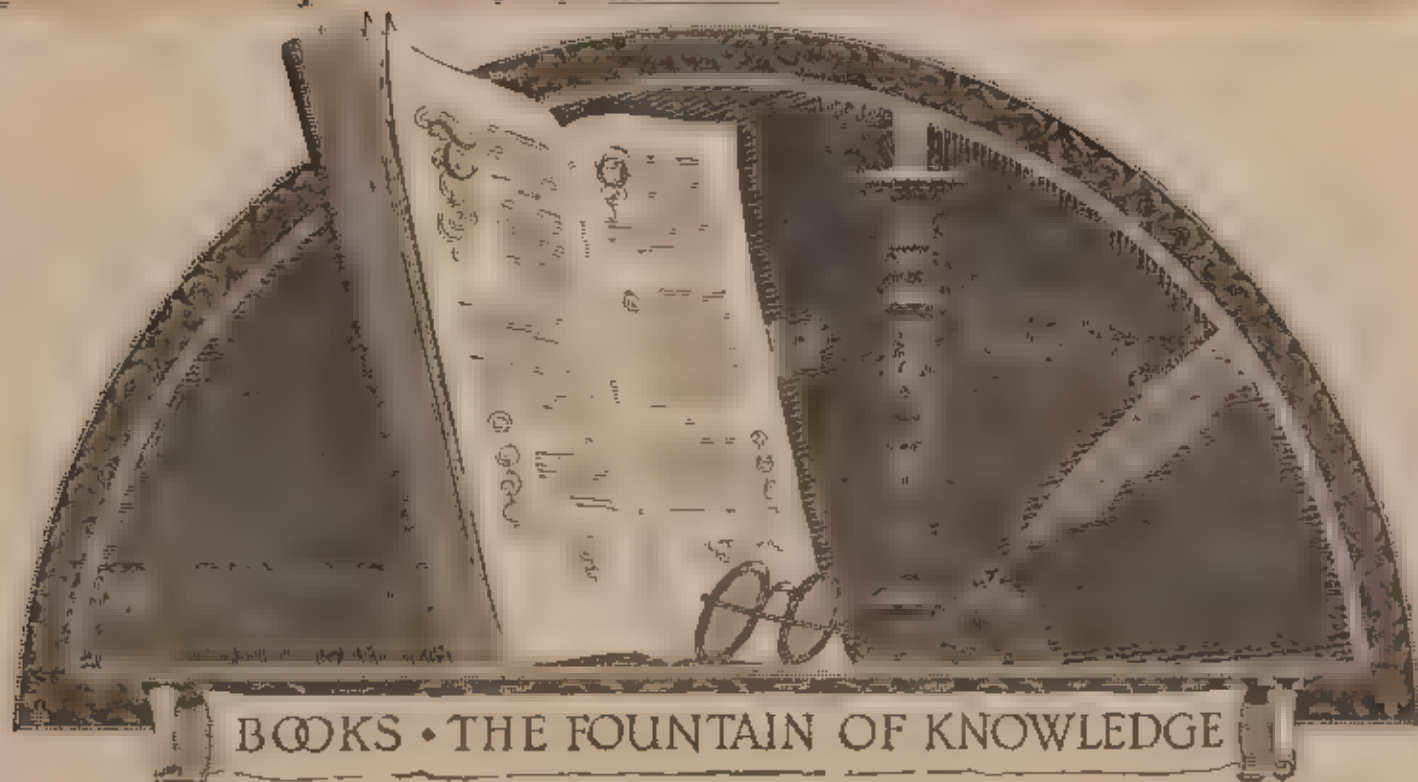
B4 TYPE VALVE, 35/- each. The B4 valve has a very great amplification factor and is free from distortion. It is the ideal valve for loud speaker work.

Filament volts	—	6 volts
Filament current	—	0.25 amp
Anode volts	—	40-100 volts

The British Thomson-Houston Co., Ltd.
(Wholesale only)

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Branches at Belfast, Birmingham, Cardiff, Dublin, Glasgow, Leeds, Liverpool, Middlesbrough, Manchester, Newcastle, Swansea, Sheffield.



BOOKS • THE FOUNTAIN OF KNOWLEDGE



R. P. Series
No. 16.

2/6

Homebuilt Wireless Components

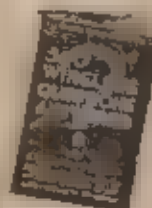
A book which shows how to make a large number of the components used in Wireless Circuits. It contains over 100 diagrams and 1000 words of text, and is the best of its kind.

You can always depend on Radio Press Books

BECAUSE every responsible person on the staff of Radio Press, Ltd. is an experienced Radio man and because Radio Press, Ltd., publish only Radio Books, every one can be relied upon as being the most authoritative of its kind. There is now such a wide range of R.P. Books that, no matter in which section of Radio you want information, there is a Radio Press Book to give it to you. All Booksellers sell them, or they may be obtained direct from Publishers (Postage 2d. per book extra).

500 Wireless Questions Answered

A wonderful Book for enthusiasts. Contains a vast amount of useful information. You will find it hard to lay it down, but it is a book you will want to read again and again.



R. P. Series
No. 13.

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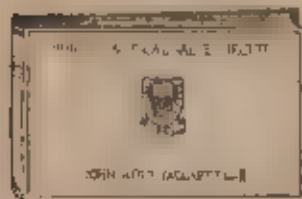


R.P. Series
No. 8.

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Pictorial Wireless Circuits

A new idea in a Book. Each circuit is shown in a pictorial form, so that you can see at a glance how the circuit is connected. This makes it easy to follow the diagram and to wire up the circuit correctly.



More Practical Valve

R.P. Series
No. 15. Circuits

A new Book by John S. Tappin. It contains a large number of new Circuits, including S.T. 100, Armstrong Super, Fleming, and many of the new valve Circuits.

3/6

Recent additions to the list

Tuning Coils and How to Wind Them

By F. Kendal, B.Sc.

There is probably no single component in a Receiving Set able to exert so much influence as the tuning coil. A highly efficient coil is the key to a successful set. This book tells you all the details of coil design, and shows you how to wind them.

Even if you feel that your present set is giving satisfactory results, the chances are that it will be improved by the addition of a better coil. This book tells you how to make a coil that will give you the best results.

As the book is illustrated with all types of coils, and includes a complete list of materials, it is a book that every Radio enthusiast should have. R.P. Series No. 18. 1/6

Radio Press Envelope No. 1—The S.T. 100

This book contains a complete set of plans for the S.T. 100, including the chassis, valves, and all the other parts. It is a book that every Radio enthusiast should have. R.P. Series No. 18. 1/6 (post free 1/9)

Wireless Sets for Home Constructors

By E. Rudolph

A new wireless Book, containing with simple, easy-to-follow plans, a complete set of plans for a wireless set. The book is divided into two parts: the first part contains plans for a two-valve set, and the second part contains plans for a three-valve set. The book is a book that every Radio enthusiast should have. R.P. Series No. 17. 2/6

Each of these two sets is a first class set, and the plans are so simple that even a beginner can make them. The book is a book that every Radio enthusiast should have. R.P. Series No. 17. 2/6

Radio Press Envelope No. 2—Four-Valve Set

This book contains a complete set of plans for a four-valve set, including the chassis, valves, and all the other parts. It is a book that every Radio enthusiast should have. R.P. Series No. 19. 2/6 (post free 1/9)

Simplex Radio Charts

We have just published a further series of charts, each of which contains a complete set of plans for a simplex radio set. The charts are: A Two-Valve Receiver, A Three-Valve Receiver, and A Four-Valve Receiver. Each chart is a book that every Radio enthusiast should have. R.P. Series No. 20. 1/6

RADIO PRESS, Ltd., Devereux Court, Strand, W.C.2.

Radio Valves and How to Use Them

A new book in the series. It tells you all the details of how to use radio valves, and is a book that every Radio enthusiast should have. R.P. Series No. 12. 2/6



R. P. Series
No. 12.

2/6

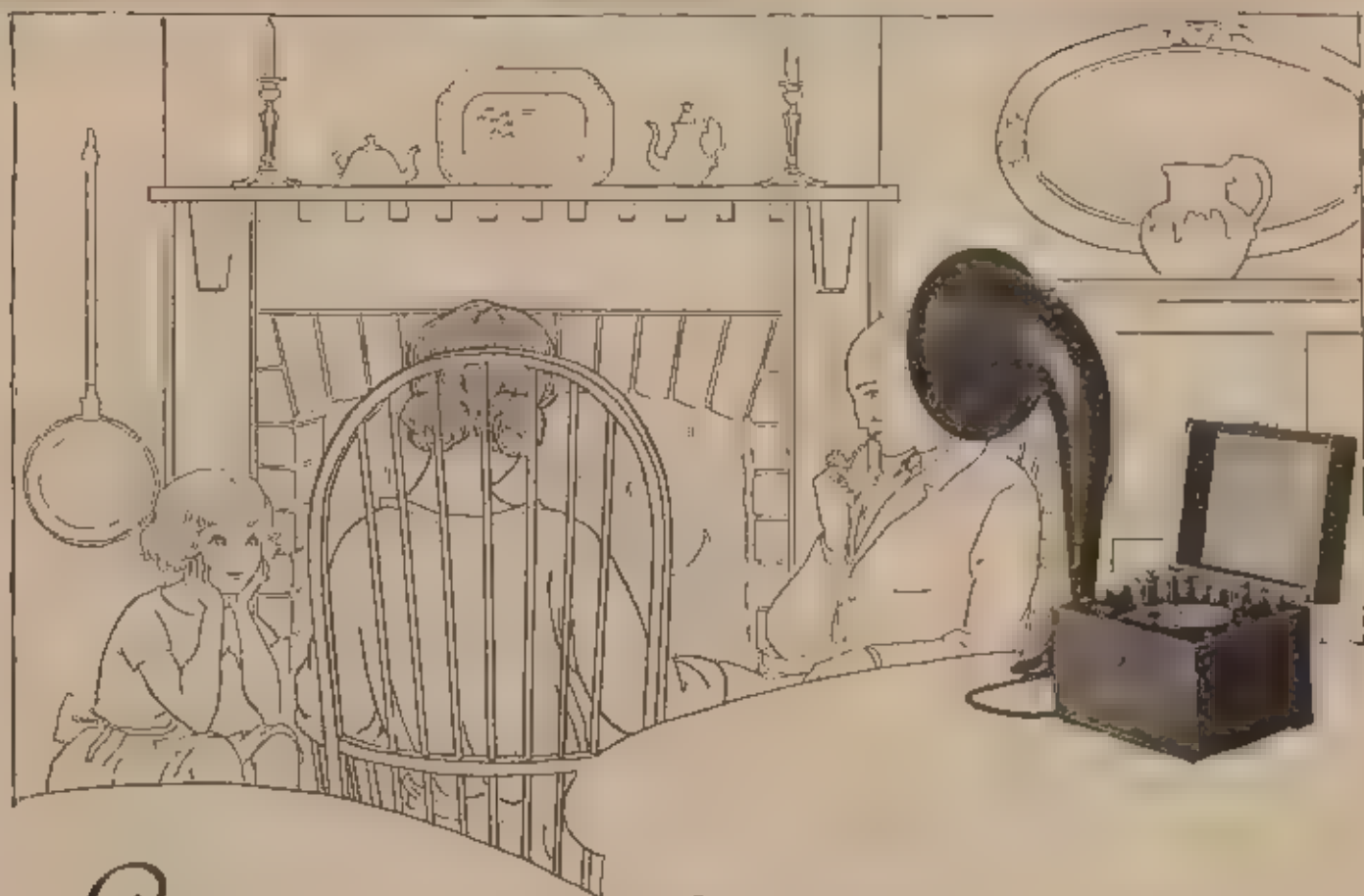
Broadcast Listener's Year Book

A new Book in the series. It contains a complete set of plans for a broadcast listener's year book, including the chassis, valves, and all the other parts. It is a book that every Radio enthusiast should have. R.P. Series No. 21. 1/6



1/6

404.



Listening to the city—

Away in your Cottage home, outside the City, far from the hub and bustle of business, you may sit in comfort during these cold evenings and yet share the enjoyment of music, the interest of late news, and other matters for your edification.

Providing you are within a radius of 30 miles of a B.B.C. Station this wonderful little set will give you unbounded pleasure. The Crystal Set and 2-Stage Amplifier combined will give most perfect results in your small room and will operate the Western Electric Loud Speaker No. 44004 direct. It is fitted with Wecovalues, which operate off dry batteries, so that you have none of the trouble attendant upon the use of accumulators, and the special distortionless transformers render the combination almost perfect in its reproduction.

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The combination illustrated above consists of —
 Wecoconomy Set No. 44080, a Crystal Set
 with Double Amplification. £12 0 0
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Suitable for reception of a B.B.C. Station within
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WECOVALUES AND WECOLOGY SETS
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The Mystery of the Microphone.

By P. P. Eckersley, Chief Engineer of the B.B.C.

MYSTERY? Why mystery? The microphone is simply our instrument for converting the wave motions of sound into equivalent variations of electro-motive force so where's the mystery? (Swank.)

Well let me try and delve a little deeper into it and explain as best I may the very heart of broadcast—the microphone.

Do you know what sound is? It is (assuming you don't) a wave motion in the air. If you blew middle C on the organ, and you had a quick moving sensitive barometer in the field of the sound, you would notice that the pressure of the air was changing some 500 times a second, and first the pressure would be above the steady pressure of the air when the sound was not present, and next the pressure would be below this normal pressure, and the alternations would follow one another 500 times a second. These pulsations of pressure falling upon the ear, produce the sensation we call sound. If the pulsations follow one another as slowly as thirty or forty times a second, we say that this is a very deep or low note, if, on the other hand, the frequency of the pulsations is 10,000 a second, people start looking round for a bat—a very high note is produced.

Where Animals Excel Us.

The human ear's limit is about 10,000 to 15,000, varying with different people; but dogs and other animals can hear higher notes. One day, during the Children's Hour a note was blown on a very high-pitched whistle—but no one listening on his wireless, or even in the studio, heard the whistle. On the other hand, lots of dogs got very excited whenever they were in range of 'phones or loud speaker. This proves that dogs have remarkable hearing for high notes, but that human beings are limited. (Query: Do dogs converse in supersonic whispers? At any rate, if they do, why don't they stick to it and stop barking? Dogs in our street, please note.)

When Sound is Dead

Thus sound is present in the air, and if we place an alarm-clock alarming away fit to wake the dead in a bell jar from which all the air has been removed, you can't hear it. (The lady who gets my breakfast ready, please don't note.) Thus, even if we shout our utmost, our prayers can never reach heaven as sound, nor can we communicate the loudest warnings to another planet were she untactful enough to hear this way.

But, Wireless, yes! Now suppose we leave a diaphragm made of steel somewhere in the way of these impulses. A diaphragm is simply a circular piece of thin metal, clamped round the edges and free to move at its centre (see your own telephones). The impulses hit the middle of the diaphragm, and make it wobble in and out; faster wobbles for higher frequency of impulses, bigger wobbles for more intense impulses.

Changing the Magnetism.

Now near the diaphragm put a magnet wound over with little spools of copper wire. When the diaphragm is nearer or further from the magnet, so the intensity of the magnetism in and around the coils varies. Changing the magnetism creates corresponding changes of electric currents in the coils, and the quicker the diaphragm wobbles, the faster change the currents, the bigger the wobble on the diaphragm, the bigger the changes in the electric currents. Thus the currents copy in intensity and frequency the sound waves impinging on the diaphragm, and this is the principle of the microphone.

Test this for yourselves by getting two pairs

of ear-phones and joining the leads together on a long piece of thin flex wire. Let a friend sit into one room and listen. Talk into your own telephones, and your friend will hear all you have to say.

This was the principle of Graham Bell's first telephone. It is the principle, more or less, of the microphone we use in London to day. The reason the telephone acts both ways is obvious, for if you vary the current in the circuit formed as above, obviously the diaphragm on the other end wobbles, too, and makes with pressure and rarefactions in the air corresponding to the original sound, and, therefore, conveys the sound to the other end. It is so simple.

Bat's Squeak and Borsoon.

Of course, we don't use exactly this principle for broadcasting, but it is something like it. We have to ensure that every frequency of sound gets an equal chance, and that the bat's squeak thrills the diaphragm just as much as the borsoon when the player is really frowning.

A resonant diaphragm such as you have in your telephones is very efficient, but it is far fonder of middle C than A or G. It also loves middle C to the detriment of organ pedal notes. Our diaphragm is so soggy, so wrapped up in cotton wool, that it favours no frequency particular.

We use another sort of diaphragm, too, in our work, which is so tightly stretched that it yeams only to resonate to those same supersonic dog notes, and to all the human frequencies it gives an equally courteous, but unfailingly unbiased attention—the true ideal of a broadcast microphone.

A Simple Problem.

We take great care that nothing shall allow our microphones to favour one frequency, and that is why in one type it rests sedately on a hammock of sponge rubber, in another the business part is hung on little springs so that the case may not resonate and affect the sounds.

So that is the mystery of the Microphone: we have nothing that moves in sympathy with the intensity and frequency of the sound waves, and in moving creates corresponding sympathetic electrical pressures. But in a broadcast microphone that sympathy must be extended to all frequencies alike from 20 to 10,000 a second. In an ordinary telephone microphone, you can, and do, use microphones that only favour those frequencies that make for intelligibility, the middle frequencies, in fact. This enables you to make these microphones sensitive without having to use valve amplifiers.

Importance of the Amplifier

Our microphones are so insensitive by themselves that you could not hear anything hardly if you were connected up to them with telephones direct. That is where the ubiquitous valve comes in, and with the amplifier our microphones are sensitive enough to hear a whisper at five yards, or an announcer changing his mind about the pronunciation of an Oxford college at the length of the studio.

Usually, when a singer sings a solo, the microphone is about ten feet from the singer—the piano is, perhaps, 15 feet to its centre away.

Resonance, or favouring any one particular note of sound either in transmitter or receiver, tends to spoil reproduction. We have done our bit; it is now up to you to eliminate your 'phone and loud-speaker resonance. But that is all another story, and you will want to turn back to my article on "Your Receiver—Our Transmitter."

Revival of the Harpsichord.

Mrs. Gordon Woodhouse and Her Art.

It is rare that the notes of the harpsichord are heard in homes to-day. Yet in the seveneenth and eighteenth centuries it was the most important of all keyed instruments. It is now regarded as essentially a musician's instrument, possessing an irresistible appeal for masters in orchestration, and has been described as a stringed orchestra in miniature. Both Delius and Vaughan Williams have composed for it.

Quite Unlike the Piano.

Mrs. Violet Gordon Woodhouse, whose unerring mastery of the capabilities of this instrument makes her one of the finest British harpsichordists of to-day, and who stands unrivalled as an interpreter of Bach and Mozart, is to play at the Station on the 25th of March.

For this reason, will have a unique opportunity of judging for themselves the charm of this rarely played instrument, for her sympathetic musical temperament, and her great technique, are qualities which lend to this occasion will appreciate.

The ancestry of the harpsichord goes back to the early days of the fifteenth century, for the principle of its mechanism is identical with that of the virginals. It is entirely different from that of the piano, in which the strings are struck by a hammer, for the virginal, like the spinet and the harpsichord, has a wood upright called a jack, which is raised when the key is struck, and this in turn causes a plectrum to pluck the strings.

A Specially-Made Instrument.

Various materials were used for the plectra, the principal being quills and leather. The former give more brilliancy, the leather produces a sweeter tone, and has the added advantage of being more durable.

In the early harpsichord the stops were controlled by the hand, but Mace's "Monument of Music," 1674, gives a description of an instrument with "various stops at pleasure, and quick and nimble to the ready touch of the foot." They are so controlled by the six wheels of the instrument played by Violet Gordon Woodhouse. The organ was made for her by Arthur Hill, whose introduction to the instrument caused her to abandon her studies as a pianist under Oscar Beninger, in order to devote herself to the mastery of the harpsichord.

Favoured by the Masters.

Apart from the Elizabethan writers, all the great masters down to Mozart and Beethoven have written for the harpsichord. Purcell, the Couperins, Rameau, Scarlatti, and Bach. The latter's harpsichord works reveal beauties unsuspected and hidden when presented upon the piano.

The programme Mrs. Gordon Woodhouse will broadcast includes works by Bach, Mozart, Scarlatti, and Handel.

It is hard to say why the harpsichord should have fallen into disuse, for particularly to the student it has a great value, and no lover of the old masters can form any idea of what their music was like, until it has been heard on the instrument for which it was written.

Listeners to 2LO will have this opportunity when Mrs. Gordon Woodhouse broadcasts on Tuesday next.

TRAINING in wireless is to be included in the syllabus of short courses of instruction for teachers arranged by the Board of Education to be given this summer.

Stories and Story-Telling.

A Talk from London by STACY AUMONIER.

The short story is acknowledged to be one of the most difficult forms of literary expression, and the masters of this style of fiction can almost be counted on the fingers of one hand. Among them most undoubtedly be classed Mr Stacy Aumonier, and in the following Talk he deals with the history of his art, and has some entertaining things to say about broadcasting.

STORY TELLING began when man first became articulate. When I generalized into what we can only call the art form, it is impossible to say. Possibly in some remote tribe a tribesman in recounting some episode of the life of the chase did it in such a manner as to catch the ear of the chief, who bade him repeat the account. The tribesman, pleased that the chief was pleased, went home and thought about it. After mature reflection, he realised that what he had said had form and order. He looked out for other episodes that he could embellish in a similar manner. Not finding these episodes happen with satisfactory regularity, he began to invent them or to twist normal happenings into a more romantic and dramatic form. The story emerged.

The Test of a Good Tale.

And these early stories were handed down and became legends. And legends became myths, and myths became sagas. And in time man began to inscribe them upon stone and upon bone, and, later, upon papyrus. Epigraphy was invented, and then calligraphy, and after a great lapse of time, printing.

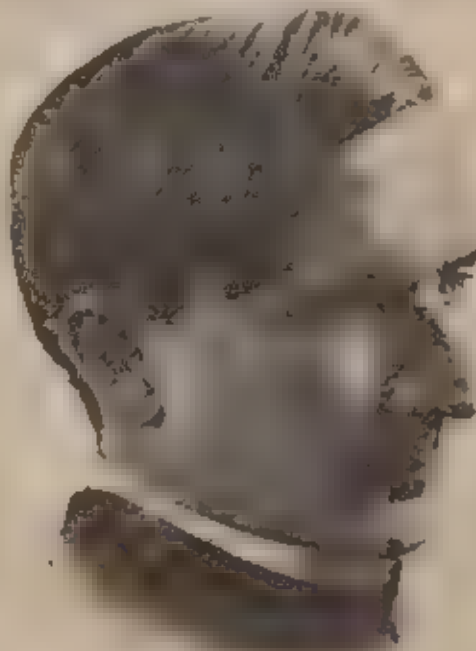
But all these sciences were merely codes, an amplification of the spoken word. For the story remains in the end a story to be told. And I think you will find that the test of a good story is that it always lends itself to reading aloud. The spoken word must inevitably have the advantage over the written word.

Seven Folds in the World.

The Bible is an oral story, or, rather, a collection of oral stories, recounted by numerous reporters. The Arabs, who have always been noted for the best of story-tellers, do not write their stories down. They are handed down by word of mouth, and built upon tradition the same way that the Gothic churches were built by the masons, the difference only being that the masons recognized the limitations of architecture, whilst the story-tellers recognized the limitations of human nature.

The Arabs have asserted that there are only seven stories in the world. And this you will find substantially true, in that the crises arising at by the interaction of human passions and human emotions are limited to about this number. Thus, you will find the same story being told in the north of Iceland, and in the south of India, with the only difference of change of character and setting.

Æsop and O. Henry, Grimm and Leonard Merrick work in essentially the same material and the inventions of steam engines, motor-cars, telephones, gramophones and wireless only affect the story to the



Mr STACY AUMONIER.

same extent that stage properties affect a drama.

I must say, then, as a person whose job it is to tell stories that Broadcasting appeals to me strongly, in that it is a reversal to the old order of things—the spoken word. It opens up an endless vista of possibilities. I foresee a day coming when instead of buying a magazine at a railway station, you will go up to a man in charge of a box and say: "Please, I want a pennyworth of Æsop's Fables."

It also holds out a further attraction. You will probably remember in Kipling's preface to

"Life's Handicap," he describes a very old one-eyed hole man, named Gobind, who lived on an island and fed the fishes twice a day with little pellets of bread. And Kipling had long talks with him about life and philosophy and such things.

And one day Gobind told the old man about his own profession, and, after reflection, old Gobind said: "Even so. That is the work of the bazaar story-teller; but he speaks straight to the men and women and does not write anything at all. Only when the tale has aroused expectations and calamities are about to attack the virtuous, he stops suddenly, and demands payment ere he continues the narration. Is that so in your craft, my son?"

Arousing Expectations.

Now this, I am sure, must appeal strikingly to professional tellers of tales. For you cannot do it with the written word. The story is typed and the editor corrects it, and you do not see it again until it appears in print. But suppose you were engaged to broadcast your story. You could work it up until it "aroused expectations," and then "when calamities were about to attack the virtuous" you could leave off.

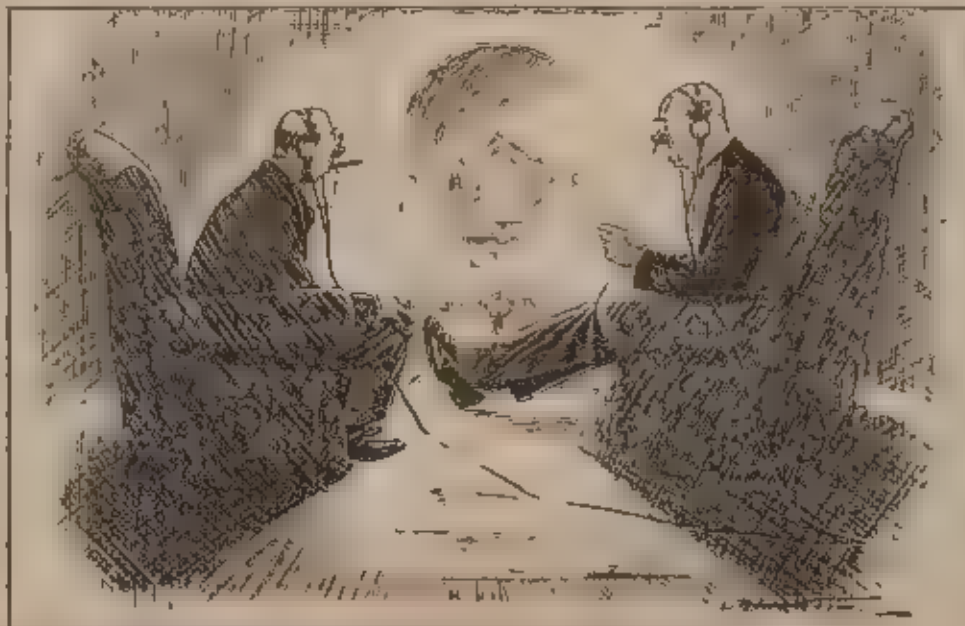
Of course the manager would come rushing in, and he would shout: "Go on, for goodness' sake, the listeners want to know what happens next!"

And then, of course, you've got him. You simply say: "Oh, do they? Well, that's all right. I'll tell them, but that will be seven-and-sixpence!"

The Dearth for Expression.

These are, perhaps, rather frivolous and absurd reasons for wishing to revert to the spoken word. But there are more commendable ones. The story of story-telling is the record of man's endeavour to convey that which is in his heart and brain to his fellow-beings. One lives and suffers and struggles; falls in love and does silly things. One finds oneself surrounded by beings apparently enduring similar experiences.

There they all go with their loves, hopes, disappointments, their regrets of hatred and treachery, their courage and optimism, their weaknesses and frailties, and one day the whole thing gets you. You want to do something with it. You want to express it in some form or another. The painter will do it in terms of paint, the sculptor hew it out of stone, the musician through a melodic idiom, but the story-teller wants to tell people about it. The exigencies of social life have driven him to set it down in black and white, but in his heart it is always the spoken word which is the more vibrant, because through that he becomes in closer contact with his fellow man.



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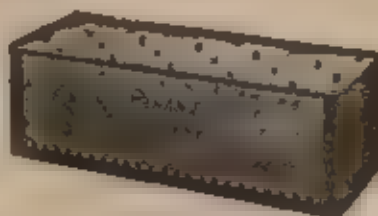
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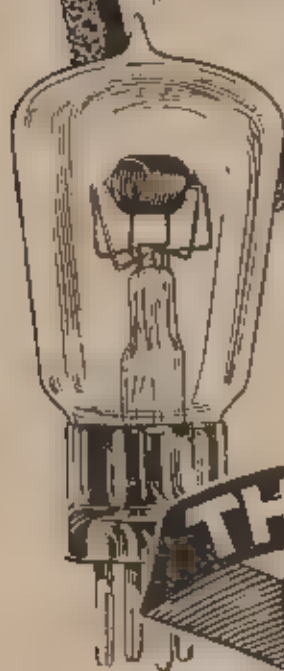
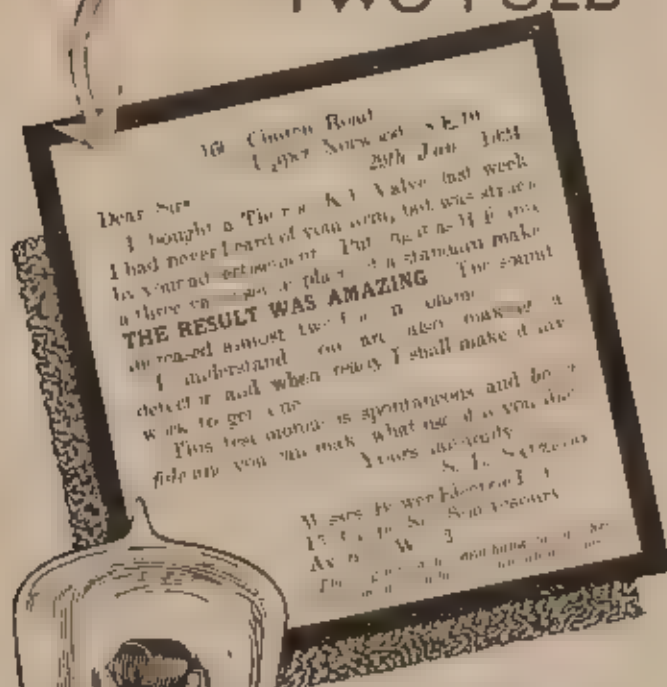
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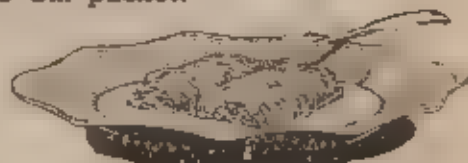
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For more U.S. data on AIDS in these programs, contact the International Broadcast News and Media Information Center.

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45. TOPICS FOR WOMEN.

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Hour of Melody of the Wireless Quartette
 from Fairview Central,
 Weather forecast for farmers.
 F. H. Blunt on "Scottish Folk Songs,"
 from Fountain,

[illegible]

2.30. A. M.—An Hour of Melody by the Wireless Quartette and Edith Johnson (Soprano).

4.45. P. M.—

5. P. M.—

6.5.—Weather Forecast for Farmers.

7. P. M.—

8. P. M.—

PERCY SCHOLLES. S.H. from 1 to 10

11. P. M.—

12. P. M.—

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12. P. M.—

7.45. THE STATION ORCHESTRA
 7.50. EDINBURGH GAELIC QUARTETTE.
 8.10. AMY MURDOCH (Contralto).
 "Eileig" (Vocal Obligato by ISAAC LOSOWSKI, Leader of the Wireless Orchestra.)

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THE CHILDREN'S CORNER.

CONDUCTED BY
UNCLE CARACTACUS

New Ways of Blowing Bubbles.

HELLO, children!

A little while ago the Bournemouth Station held a competition on "My Favourite Book, and Why." Lots and lots of people went in for it, and the winner in the class for those under seventeen was Miss S. Brewer, Lindum House, Churchill Road, Gloucester. Her entry was so good that I am printing it here:—

My favourite book! What gems these wireless wizards are! Did they know that I've just read the most glorious book and am simply bubbling over with enthusiasm, and dying to tell someone all about it? And it is so difficult to find sympathetic listeners when your favourite is "Heirs Apparent." No! Not because they're not interested. Oh, no! Simply because they're too absorbed in it themselves to listen to your juvenile jubilation!

A Thrilling Story.

I adore that book for all the reasons that a book-lover musters to justify his mania. It is a thrilling story of modern youth, told in the vivid style essential to its theme, and free from those unignominious interpolations of the author known as "personal ornament."

I am sure it will be of more immediate benefit to England than any classic. It is so easy to read that it will be read by hundreds to whom "Dickens" is but a name, and a forbidding one at that!

So closely are we in sympathy with the characters that we are drawn imperceptibly into the vital problems of modern life forming the heart of this absorbing book. The greater freedom gained by the youth of to-day, with its attendant difficulties and temptations, is cleverly depicted and set against the old regime, until we almost agree that "the young idea is only the old in a different kind of slang."

To those who have seen, "Heirs Apparent" brings new questions; in those who have not, it must awaken thought—and thought guided by such a freshly written book is surely invaluable.

To turn to the more personal side, the characters are magnificently true to life, especially, I consider, in the case of Audrey Nythe—the modern type, frank, healthy, common-sensed, and also, unfortunately, Major Lifford, gallant but utterly selfish old soldier.

Finally, the story ends happily—and I think unhappy endings should be prohibited by law, for their poison deserves that mental glow which is Othello's triumph.

After all,

A merry heart goes all the day.

Your sad tires in a minute."

You agree, Heirs Apparent? . . .

Here's a talk which you may have heard broadcast a little while ago.

A TALK ABOUT BUBBLES.

By ERNEST WALTHAM.

Children, have you ever longed to blow bubbles which will last enough time for you really to enjoy them before they burst? When you blow them into the air from a pipe they soon break, do they not?

Why not try blowing them on to wires for a change?

I will tell you of a pretty experiment which

I have just made for myself. I call it a bubble chute, or aerial roadway. Most of you have seen a water-chute at an exhibition, where little boats run down an in-line on two rails and bounce about in a pond at the foot. Well, you can do this with bubbles if you make a little runway of two thin wires, and stretch them, slightly, a little distance from the floor at the highest point, and only a few inches from the floor at the lowest point. They should be fastened to a piece of furniture at a distance apart of one inch and a quarter; they must be kept parallel and tight all the way down to the floor, where you hang them over the edge of a box, or something of the kind, so that the bubble can slide easily off the rails on to the floor. On the floor you make a "pond" to

such runways might be made, both meeting at the "pond," and then the fun would start when the "pond" tries to fill up with bubbles from the accumulated efforts of several blowers.

By the way, I thought that BLO were spoiling my bubbles when I first started my bubble chute, as they happened to be broadcasting a concert at the time. Every bubble I tried to make on the wires broke at once.

My wire frame looks just like a miniature aerial, and I thought that it was being affected by the wireless waves, so I connected it with the earth terminal of my set, but still the bubbles broke! I then discovered what the trouble really was, I had forgotten to wet the wires with the soap solution first. Do not forget to do that, it is most important. Keep the wires well wetted.



UNCLE JEFF AND HIS DOG "GEORGE."

The other night quite a lot of dogs broadcast their barks from London Station. In this photograph Uncle Jeff is seen rehearsing his pet terrier before the microphone.

receive them, not of water, but just a piece of woollen cloth, bunched up all round to form a "hollow pond."

To give you an idea of the best angle to make your railway, I have made one for a table. My two upright supports for the wires are five feet apart.

The highest end is two feet high, and the lowest end is only ten inches high. Draw a straight line from the highest to the lowest to see the angle of fall. When you have made it, stand well above the highest end, on a chair if necessary, and blow a bubble on top of the two wires, and it will run slowly down the chute and fall into the "pond." Blow another quickly to follow it, and this will fall so near to the first one, if your "pond" is not too big, that it will press on to it, and, if you are lucky at the first shot, the two will jump into one bubble, with a jolly-like spring, making one large bubble.

A First-Class Game.

Now, instead of letting them fall into the "pond," you can place a piece of woollen cloth on the wires, to form a buffer stop, and, when the two bubbles spring into one, the big bubble will jump up a little way into the air, and land on the wires again, without falling off.

There is such a variety of amusement to be had from this simple experiment, that it is quite worth while trying it. For instance, two

The Professor's Experiment.

Talking about electricity, I had good reason to suppose that the wireless was affecting the bubbles, because I well remember seeing a professor place two bubbles side by side, each one hanging from a wire ring, and when he brought them close together, so that they just touched each other, he made them join into one, by pulling a stick of sealing-wax from under a piece of warm, dry flannel, although he was at the other end of the room. I believe the wires were carefully insulated from each other. You are all electricians nowadays, so you know what "insulating" means.

The wire ring dodge for holding a bubble is quite a good idea. Make a hole in the air, and twist a piece of wire round it! Better still, wind a thin wire round the base of a tumbler, and twist the end round the wire, and you have a serviceable ring, leaving a length for a handle, so that it will rest in the mouth of an empty bottle for support.

Next, dip your ring into a saucer of soap solution, and pull it out sideways, and you will find that there is a film of soap in it. Examine the film under a good light, and watch the colours forming on it.

One Inside the Other.

There is an apparatus to be bought for that purpose, but it is rather expensive. Now replace the ring, with its handle in the mouth of the bottle, and blow a bubble through the top of the ring on to its lower side, with a glass tube.

This tube must be well wetted with the solution, all over.

We will now suppose that you have a bubble hanging on the ring, remove the tube, dip it again in the solution, and you will be able to pierce the film as before and blow another bubble inside the first one.

In order to blow bubbles successfully, especially the sort which I have just described, it is necessary to have a good strong soap solution.

Try with a good brown or yellow soap, scrape fine shavings off it, enough to fill an egg-cup.

Turn this into a breakfast cup of cold water, and add about an egg-cup full of the best glycerine you can buy. If you allow it to stand long enough you ought to have a good solution.

On my other desk I've got a whole collection of bubbles who will send me another to add to my family? (ARA TALKS.)

(Continued on the facing page.)

The Children's Corner.

SABO IN A BALLOON.

By E. W. Lewis.

ON November the Fifth Isabel had a party and in the evening, as soon as ever it was dark there were fireworks.

Isabel thought that Sabo would like to see the fun, and she took him out into the garden. But he was so terrified by the loud banging of the maroons and the spattering of the Catherine wheels and the roar of the rockets, that he hid himself inside a large paper balloon which was waiting against the wall.

Everybody was so interested in the fireworks that no one noticed that Sabo had gone, or where he had gone to, and he made himself warm and cosy inside the tissue paper.

When the last rocket had been let off two boys came running for the balloon. Sabo felt himself being lifted off the ground, and was in two minds whether he should call out or not; through the bottom on to the lawn. Then he thought that Isabel might scold him for hiding there, and so he clung as tightly as he could on to the framework inside.

The next moment there was a smell of burning. The air round about him became all at once very warm, and before he could make out what was happening, the balloon was off!

As it took the air, swaying gently like a bell. Sabo could hear the children clapping their hands and shouting with delight.

They watched it as it rose higher and higher, looking now like a huge yellow pear, and drifted further and further away. Now it was so far off that it looked quite tiny, and the light in it was so faint that, right away in the distance, it hung in the sky for a moment like a dual star, and then passed out of sight.

"I wonder where it will drop," said one of the boys, whose name was Billy.

(Continued from the facing page.)

"Over the hills and far away!" cried Isabel, laughing. "Let's go inside and warm ourselves by the fire."

Billy stood looking at the place where the balloon had disappeared, and then at the rising moon. "I wouldn't mind going off in a balloon," he said to himself.

Sabo did not mind much either. He was not



The next moment a monkey began tearing the balloon to pieces.

the least bit afraid. His first thought was that he was leaving Velvet, and he wished he had had a chance of saying good-bye to her, she would be worried when she did not find him in his usual place. But there was no help for it now, he was off on a journey, and it was really most exciting.

The cotton wool had burned itself out and had fallen like a crumpled black leaf somewhere to the earth, and no doubt the balloon would have begun also to fall, as the air inside it grew cooler, had not some young Breezes, who were playing games together about the tree-tops under the moon, caught sight of it. They began to blow it, as you blow a feather or some bubble down, and chased it through the sky.

Let us blow it back home with us," said one of them; and, just as a long walk seems shorter if you have something to play with as you go along, the Breezes blew the balloon before them on their way back home.

By this time Sabo had made himself as comfortable as he could; and, except that he felt a little cold, he was enjoying himself.

Sabo must have slept, rocked in that funny cradle, for when he opened his eyes the dawn had come. The sky all about him was full of a "rosy light"; and then, over the rim of the earth, the blazing forehead of the sun appeared. It was day.

The Breezes scurried off like children who fear to be caught playing truant; and down through the still air the balloon began to fall.

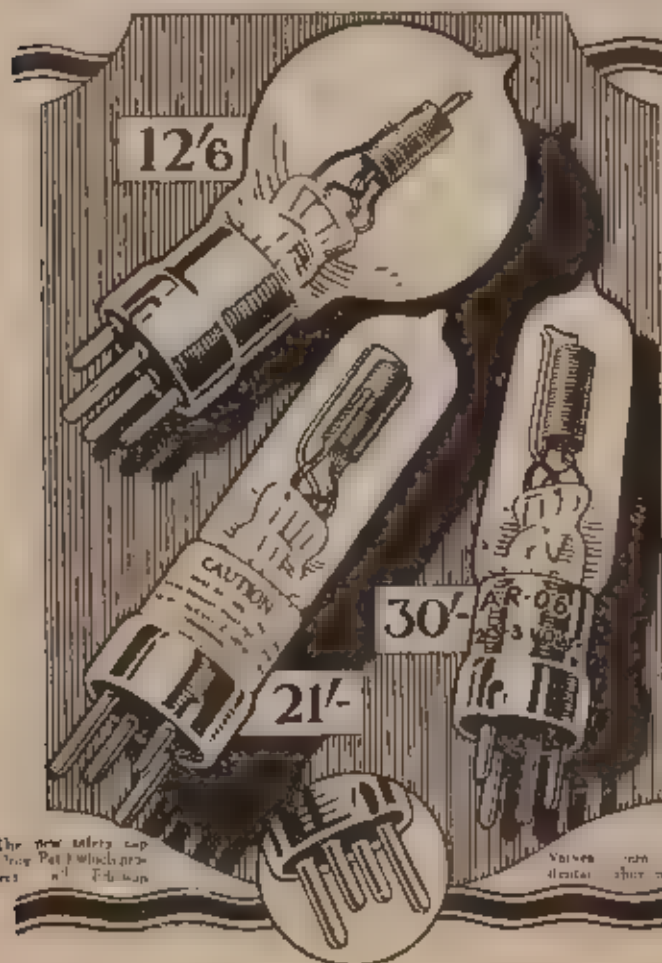
Sabo could see blue water, yellow sands, and leafy trees beneath him. They came nearer to him. They seemed to rise to meet him. And soon the balloon dropped gently upon the shore, bounced once or twice, and then lay over on its side.

Sabo crept out, looked round about him, and stretched himself.

The next moment, to his surprise, a young monkey came hopping out from the trees above the beach, and, tearing the balloon to pieces, began to stuff his cheeks with tissue paper.

Sabo watched him. "Well," he said to himself, "I've got here; but however I will get back again, goodness knows!"

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MONDAY, March 24th, to THURSDAY,

2.0-4.20 Programme relayed by Wireless S.B. from Birmingham.
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10.0 and onwards Programme S.B. from Birmingham.

FRIDAY, March 25th.

2.0-4.20 Programme relayed by Wireless S.B. from Birmingham.
8.0-10.45 S.B. from Birmingham.
10.0 and onwards Programme S.B. from Birmingham.

Grand Opera Night.

8.0-10.45 S.B. from Birmingham.
10.0 and onwards Programme S.B. from Birmingham.

Chorus: "The Merry Widow"
Solo: "The Merry Widow"

George Huggins, L.R.A.M., A.R.C.M.
Solo: "The Merry Widow"

Soprano and Contralto: "The Merry Widow"

The Drinking Song
Solo: "The Merry Widow"

Chorus: "The Merry Widow"

Solo: "The Merry Widow"

Chorus: "The Merry Widow"

Solo: "The Merry Widow"

Chorus: "The Merry Widow"

Solo: "The Merry Widow"

Chorus: "The Merry Widow"

Solo: "The Merry Widow"

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7.0-8.0 S.B. from London.
8.0-9.0 S.B. from London.

9.0-10.0 S.B. from London.

SATURDAY, March 26th.

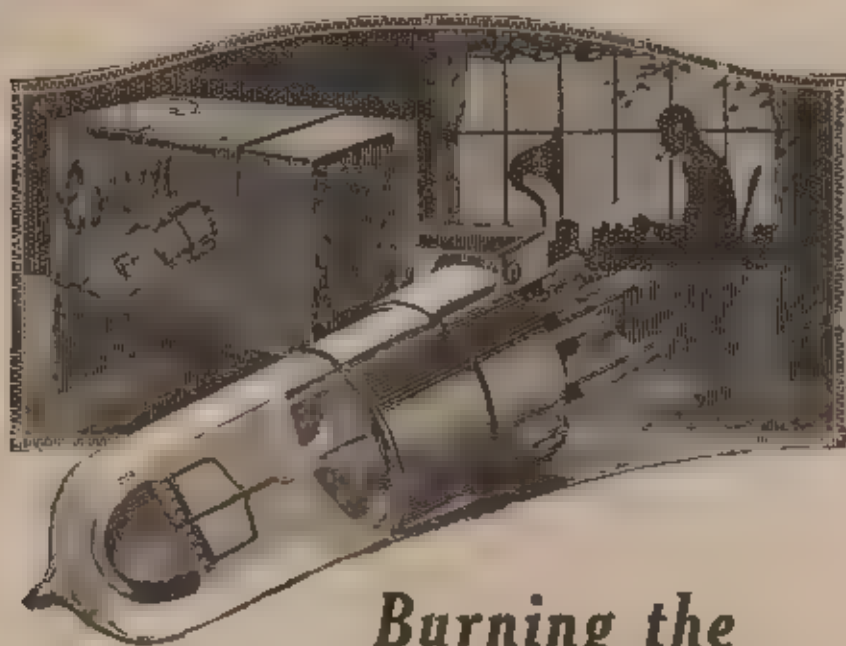
8.20-11.0.—Programme S.B. from London.

11.0-12.0.—Programme S.B. from London.

12.0-1.0.—Programme S.B. from London.

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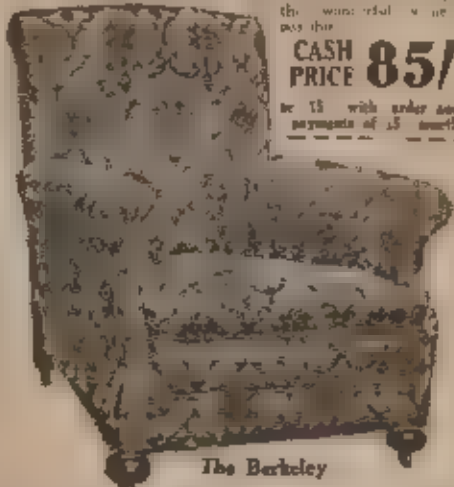
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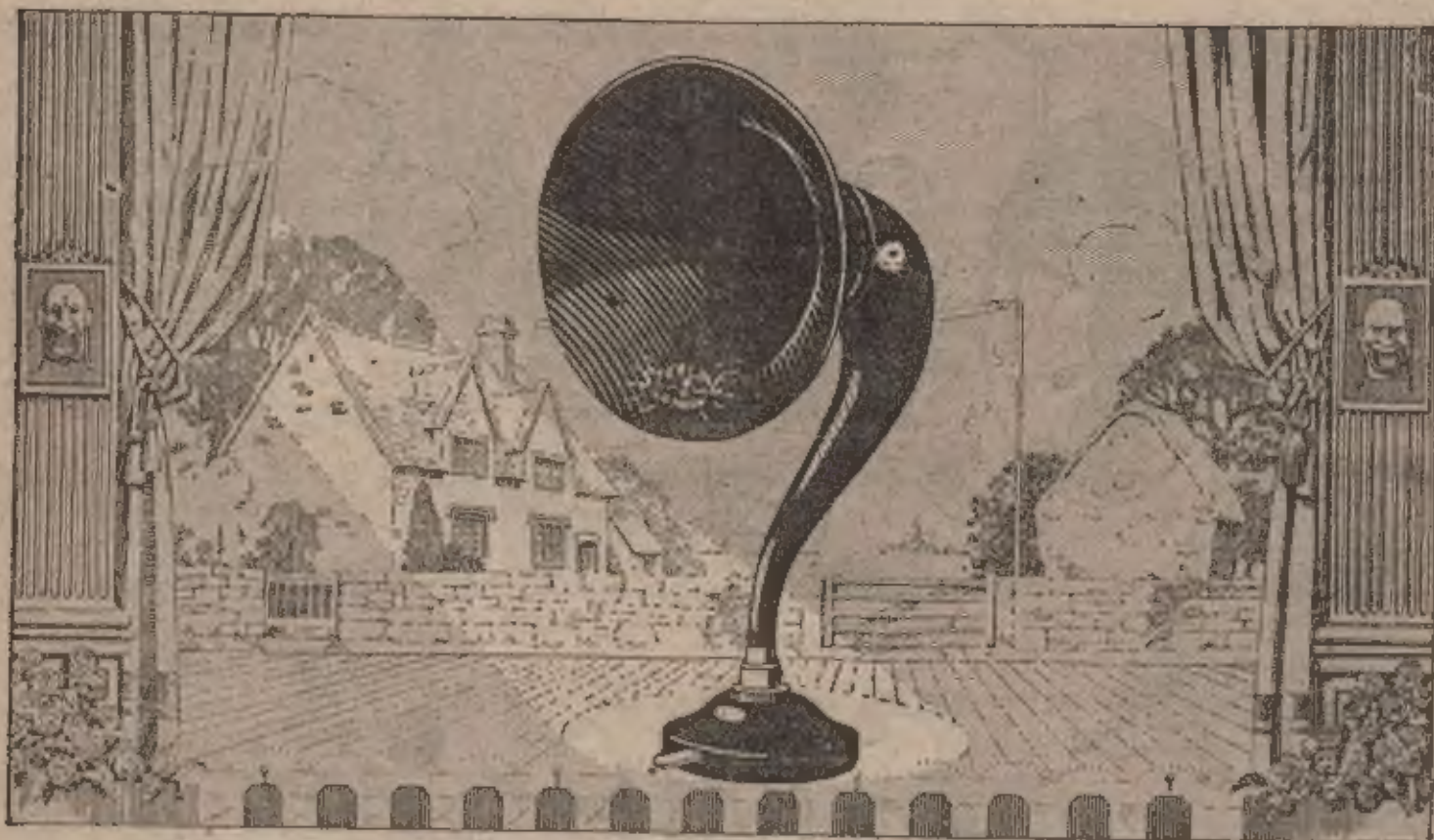
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